# Elections, Individuals and Incumbency
# Campaign Contributions following Close Congressional Races

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**Abstract**

I estimate the causal effect of candidates' election results on the future contribution behavior of their donors using a regression discontinuity design. I find that individuals contributing to narrowly-winning House candidates are nearly 10 percentage points more likely to contribute to a House candidate in the following cycle than contributors to narrowly-losing candidates. Further, these effects persist for up to three cycles following the close election. I show that much of this effect is due to a discontinuity in future giving to the same candidate. An analysis of contributors to Senate candidates corroborates these findings. Descriptive analysis suggests that individuals are more likely to make future contributions when their candidate runs again, regardless of whether they won or lost, calling into question a "reinforcement learning" hypothesis that underlies behavioral theories of political participation. This has implications for the incumbency advantage, as incumbents can rely more on contributions from past donors to their district than can new challengers. I estimate that candidates from narrowly-winning parties receive $130K more in individual contributions than those from narrowly-losing parties in the following cycle, almost all of this coming from previous donors to the district.

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# 1 Introduction

The "paradox of voting" is a seminal issue in economics and political science. A strategic-minded individual, weighing the numerous costs of voting against the near-infintessimal chance her vote decides an election, should *surely* choose not to cast a ballot. Yet, hundreds of millions vote in national elections world-wide. This ubiquitous revealed preference for voting has driven researchers to investigate motives beyond purely strategic or influential concerns.[1]

A number of behavioral models have been proposed to rationalize widespread political participation that assume a mechanism of "reinforcement learning," in which individuals adjust future behavior according to whether they receive a positive or negative outcome (i.e. their candidate of choice wins or loses) (Bendor, Diermeier and Ting, 2003; Fowler, 2006*b*). Individuals voting for the winning candidate are predicted to participate more in the future, while individuals voting for the losing candidate will participate less. While on its face such an assumption seems reasonable, there is little empirical evidence to support it. Much of the empirical work on political participation focuses on the act of participating in an election itself, offering few insights into the role of its results. These studies (Gerber, Green and Shachar, 2003; Meredith, 2009; Fujiwara, Meng and Vogl, 2016) have helped to build a consensus among turnout scholars that political behavior is habit forming (Denny and Doyle, 2009).

Whether election results influence future political behavior has implications beyond its place as a primitive in models of participation. If supporters of winning candidates are more politically active in the future than supporters of losing candidates, this differential participation will strongly favor incumbents. Thus, uncovering whether election results themselves influence political behavior can bolster understanding of what underlies the well-documented "incumbency advantage" that exists in U.S. legislatures (Parker, 1980; Cox and Katz, 1996; Ansolabehere and Snyder, 2002, 2004; Lee, 2008).

The main challenge to answering this question in the realm of voting is that, by design, voters' decisions in the ballot box are unobserved. Voting, however, is not the only form of political participation. Individuals can also support candidates by making monetary contributions to their campaigns, parties or other affiliated bodies. Campaign finance laws require that campaigns report itemized contributions for those gifts totalling more than

[1]There is a large literature investigating these alternative motivations. Past empirical work has focused on altruism (Fowler, 2006*a*; Fowler and Kam, 2007; Dawes, Loewen and Fowler, 2011), social considerations (Gerber, Green and Larimer, 2008; Dellavigna et al., 2017) and media influence (Gentzkow, 2006; DellaVigna and Kaplan, 2007; Enikolopov, Petrova and Zhuravskaya, 2011; Gentzkow, Shapiro and Sinkinson, 2011), among other factors.

$200. These reports are freely available from the Federal Election Commission, meaning that, unlike in the case of voting, the candidates individuals support are observed.

Observed contributions behavior, like widespread voting, cannot be fully rationalized by strategic motives. Many individuals make small contributions that have little chance of influencing electoral outcomes. Federal law also limits how much an individual can give to a campaign to $2700 per election (Federal Election Commission, 2017).[2] Thus, even the largest individual contributions are not expected to meaningfully affect elections. But while a single contribution may do little on the margin, in aggregate contributions from individuals play an outsize role in campaign finance. In 2008, for instance, more than 90% of contributions made to Federal candidates or parties, a total of $4.87 billion, came from individuals (Fremeth, Richter and Schaufele, 2013).

In this paper, I examine political contributions to study the relationship between election results and future political behavior of participants, here the contributors. Specifically, I ask whether contributors to winning candidates are more likely to make future contributions than contributors to losing candidates. A similar question is posed in Peskowitz (2017). Using fixed effects regressions and a minimum-distance regression discontinuity design, Peskowitz estimates that individuals contributing to winning candidates are 6 percentage points more likely to contribute in the next cycle than contributors to losing candidates. He interprets this result as evidence of reinforcement learning. However, this finding alone does not necessarily support a reinforcement learning hypothesis. As Lee (2008) highlights, winning candidates are much more likely than losing candidates to run in future elections. From the contributor's perspective, this amounts to a supply shock that affects contributors to winners and losers differentially.[3][4] Thus, a primary contribution of this paper is that I also examine the destination of future contributions, both in terms of which candidates receive these contributions and which localities these candidates represent, in order to tease apart these competing explanations.

Using contributions data from the Federal Election Commision, I estimate the causal effect of election results on future contribution behavior with a regression discontinuity design.

[2]Historical limits going back to 2002 are available from the Center for Responsive Politics (2018*b*), here: https://www.opensecrets.org/overview/limits.php.

[3]Here, the contributor is a "political consumer" and the candidate a firm in some sense. An alternative perspective would be to consider the contributor a supplier of contributions, which the candidate demands. In this latter framing, exit of losing candidates would amount to a demand shock.

[4]Peskowitz (2017) acknowledges this as a possible explanation of his results. However, he does not show how much of the measured discontinuities are attributable to giving to the same candidate. Rather, he estimates that the dollar amount of contributions to new candidates increases by 17%. The dependent variable used in this regression is $log(\text{New Contributions} + 1)$, the log of one plus the dollar amount of contributions to new candidates. Individuals who do not make a reportable contribution thus receive a value of zero in this specification. He does not present extensive margin results for giving to new candidates.

I do this separately for contributors to candidates running for the U.S. House of Representatives and Senate. In the House, I find that, in the cycle following a win, contributors are nearly 10 percentage points more likely to make a donation. Significant discontinuities persist for at least two more electoral cycles. However, much of this is driven by discontinuous giving to the same candidate in future cycles. There is no evidence of increased giving to new candidates, new districts or donations to the Senate. Further, a descriptive analysis shows that contributors to winners and losers give at a similar rate when their candidate of choice runs again. In the Senate, I find a similar discontinuities in giving, again driven by continued gifts to the same candidate. Here too there is little to no evidence of spillovers to other candidates or states.

These results cast doubt on whether reinforcement learning is at play in political behavior. However, these findings still imply that incumbents have a fundraising advantage rising in part from a propensity for their donors to make future contributions. I test for this as well. Following Fouirnaies and Hall (2014), I show that House candidates from winning parties receive $130K more on average in future individual contributions than candidates from losing parties, almost all of which comes from individuals who had previously given to the district. This presents a significant advantage to incumbents, as the average general election House candidate raises just under $600K in total from individual contributions (Center for Responsive Politics, 2018*a*).

In highlighting the importance of candidates to contributions behavior, this paper also speaks to a literature on the determinants of political contributions. Previous studies have highlighted ideological (Ensley, 2009; Johnson, 2010; Barber, 2016; Barber, Canes-Wrone and Thrower, 2017), access-related (Snyder, 1990) and strategic (Gimpel, Lee and Pearson-Merkowitz, 2008; Hill and Huber, 2017) motivations for contributing. This study shows that separate of those concerns the candidates themselves are important in motivating contributions. In addition, this is one of only a handful of studies to examine variation in political contributions over time (Peskowitz, 2017; Fremeth, Richter and Schaufele, 2013). Lastly, the party-level incumbency results contribute to a large literature on the causes and consequences of the incumbency advantage (works cited above as well as: Levitt and Wolfram, 1997; Hirano and Snyder, 2009; Fowler, 2014; Fowler and Hall, 2017), specifically the financial incumbency advantage (Fouirnaies and Hall, 2014). Here, I show a previously unknown source of financial advantage in repeat donors.

The remainder of this paper proceeds as follows: Section 2 outlines the empirical strategy; Section 3 provides background information on individual campaign contributions and describes the data used for this paper; Section 4 presents results related to individual contribution behavior in the House (4.1) and Senate (4.2); Section 5 details the strategy and

results relating to the financial incumbency advantage; Section 6 concludes.

## 2 Empirical Strategy

To estimate the causal effect of candidates' electoral outcomes on the future giving behavior of their donors, I employ a regression discontinuity design. I estimate regressions of the form:

$$y_{i,c,t+k} = \alpha + \tau \text{CandWin}_{c,t} + \beta_1 \text{Voteshare}_{c,t} + \beta_2(\text{CandWin}_{c,t} \times \text{Voteshare}_{c,t}) + \varepsilon_{i,c,t+k} \quad (1)$$

where $y_{i,c,t+k}$ is a giving outcome of interest for individual $i$, who gives to candidate $c$ during election cycle $t$, in future cycle $t+k$, $\text{Voteshare}_{c,t}$ is candidate $c$'s two-party general election voteshare in cycle $t$, $\text{CandWin}_{c,t}$ is an indicator taking value 1 if candidate $c$ wins in cycle $t$ and $\varepsilon_{i,c,t+k}$ is the error term.[5] $\text{Voteshare}_{c,t}$ is normalized by subtracting 0.5 from the actual two-party voteshare of candidate $c$ in cycle $t$, so that $\text{Voteshare}_{c,t}$ represents the distance from the plurality threshold.

The coefficient of interest here is $\tau$, which respresents the discontinuity in giving outcome $y_{i,c,t+k}$ when the recipient candidate goes from barely losing (voteshare just below 50%) to barely winning (voteshare just above 50%). The primary identifying assumption is that the results of elections near the plurality threshold are sufficiently random to be considered exogenous. Further, I require that neither candidates nor contributors are able to predict or manipulate the results of these close elections.[6]

Individuals may contribute to more than one candidate. If more than one of these candidates participates in a general election, an individual could be assigned multiple running variables and treatment (candidate win or loss) indicators. To avoid this issue, I estimate equation (1) only for individuals that contribute to one candidate during a given election cycle. While this limits the external validity of findings, this strategy still addresses the vast majority of donors, as I discuss further in section 3.1. Lastly, I will estimate equation (1) separately for donors to the House and Senate. This is done because institutional differences between the houses (specifically, differing terms) potentially affect individual contribution behavior in different ways.

[5] "Two-party voteshare" is the candidate's vote total divided by the total number of votes received by the Democratic and Republican party candidates. In this study, only Democratic or Republican candidate recipients are considered. In most elections in the U.S., the winner and runner-up will be from the Democratic or Republican party. Thus, this is the relevant running variable. Use of the two-party voteshare rather than overall votershare is common in studies of this type.

[6] McCrary tests for manipulation are depicted in Appendix figure 6

I concurrently estimate the likelihood that a candidate seeks future office following a close election to examine how this relates to any estimated discontinuities in giving behavior. To do this, I estimate a regression of the form:

$$\begin{aligned}\text{Candidate Runs}_{c,t+k} = \alpha + \tau\text{CandWin}_{c,t} + \beta_1\text{Voteshare}_{c,t} \\ + \beta_2(\text{CandWin}_{c,t} \times \text{Voteshare}_{c,t}) + \varepsilon_{c,t+k}\end{aligned} \tag{2}$$

where Candidate $\text{Runs}_{c,t+k}$ is an indicator taking value 1 if candidate $c$ runs a primary or general election campaign in future cycle $t + k$. Other terms are defined as they are in equation (1). The identifying assumptions here are analgous to those necessary to estimate equation (1).

In all regressions, I utilize a bandwidth of 10 percentage points on either side of the plurality threshold and employ triangular weights.[7]. Equations (1) and (2) are estimated with standard errors clustered at the Congressional district level for the House or Representatives and at the state level for the Senate.

# 3 Background and Data

Section 3.1 provides background information regarding the significance of individual campaign contributions to Congressional fundraising, as well as the distribution of donors to Congressional candidates. Section 3.2 describes the data used for this project.

## 3.1 Individual Contributions to Federal Congressional Elections

Contributions from individuals constitute a significant portion of all funds received by Congressional campaigns. Table 1 provides a breakdown of Congressional campaign funding by house, party and source during the 2013-2014 election cycle. There are five funding sources displayed in this table: "Small individual contributions" (Small Ind.), which are donations from individuals that total $200 or less, "Large individual contributions" (Large Ind., emphasized in bold), donations from individuals that exceed $200, contributions from Political Action Committees, candidate self-funding, and all other sources. Panel A shows percentages of total funds received from each funding source for candidates to the House or Representatives, while Panel B shows the corresponding information for candidates to the Senate. It is clear from table 1 that individual contributions dominate fundraising in both houses. The majority of funds received by Democratic and Republican House candidates

[7]Estimates with a rectangular kernel and other bandwidths can be found in Appendix tables 19, 20, 21 and 22.

Table 1: Congressional Candidate Funding Sources, 2013-2014

| | Small Ind. | Large Ind. | PAC | Self-Funding | Other |
|---|---|---|---|---|---|
| ***Panel A**: House* | | | | | |
| Democrat | 10% | **48%** | 34% | 5% | 3% |
| Republican | 7.5% | **44.2%** | 33.8% | 9.9% | 4.6% |
| ***Panel B**: Senate* | | | | | |
| Democrat | 17.9% | **55.9%** | 16.7% | 2.5% | 7% |
| Republican | 11.8% | **53.9%** | 18.1% | 7.5% | 8.7% |

*Notes*: Entries are percentages of aggregate campaign funds from the sources in the column headings. Small individual contributions (Small Ind.) are contributions from individuals totaling less than $200. Large individual contributions (Large Ind.) are contributions from individuals totalling more than $200. *Source*: Center for Responsive Politics (2018*c*)

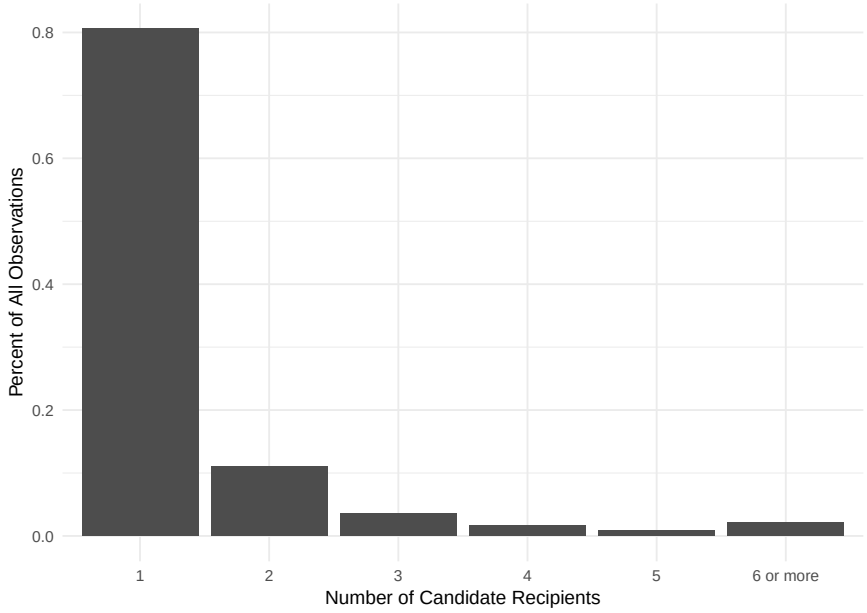
come from individual contributions, with nearly 60% of House Democrats' and 52% of House Republicans' funds coming from individual contributions. Among individual contributions, the vast majority of funds come from large contributions. Large contributions make up 48% of all money raised by House Democrats and about 44% of all money raised by House Republicans, in both cases more than 80% of funds raised from individual contributions.

This pattern also exists in the Senate. Senate Democratic and Republican candidates both receive the majority of their funds from large individual contributions alone, accounting for 56% and 54% of their receipts, respectively. As with the House, large contributions make up the majority of funds from all individual contributions in the Senate, accounting for more than 75% of all individual contribution funds for both Democrats and Republicans.

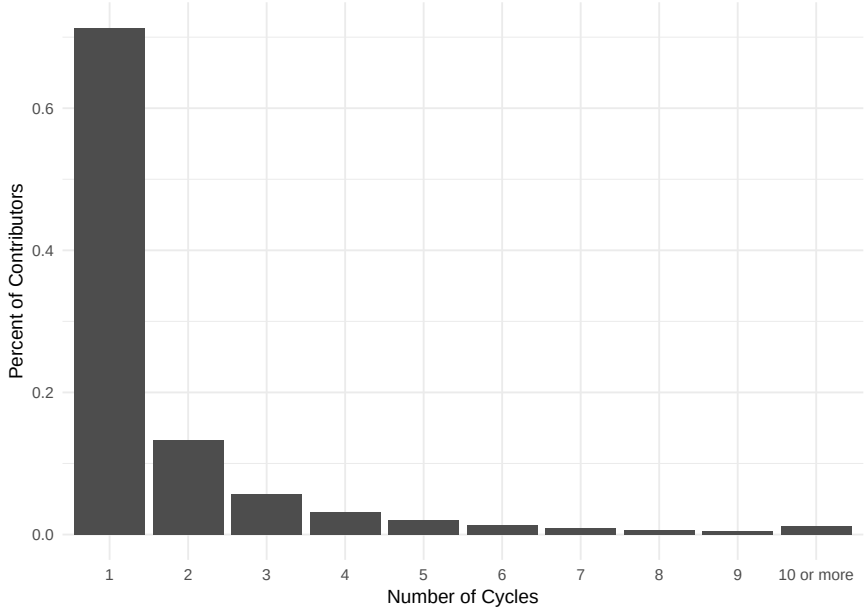
The above discussion illustrates the central role individual contributions, especially large contributions, play in Congressional campaign fundraising. I now provide two stylized facts on the source of these funds, the donors themselves. Figure 1 is sourced from the Database on Ideology, Money in Politics, and Elections, a repository of campaign finance data that is the primary data source of this project. Panels (a) and (b) detail the distribution of donors making large contributions to Congressional candidates from 1979-2014. Panel (a) depicts a histogram of donors by the number of candidates they support during any one cycle. This chart show that the vast majority of donors (nearly 80%) make a large contribution to only one candidate in any given cycle. Of the remaining 20%, about half contribute to two candidates and the other half support three or more. Panel (b) depicts a similar histogram of donors by the number of cycles in which they make a large contribution. Again, there is significant mass at 1, with more than 70% of donors making a large contribution in only one cycle. There is a large drop-off after this, with a little more than 15% of donors participating in two cycles and the remainder participating in three or more.

Figure 1: Distribution of Individual Contributors, 1979 - 2014

(a) Histogram of Number of Recipients




(b) Histogram of Cycles Active




*Notes*: In panel (a), contribution records are collapsed to the contributor-candidate-cycle level. The histogram portrays the number of times a contributor-candidate appears during a given election cycle. In panel (b), contribution records are collapsed to contributor-cycle level. The histogram portrays the number of times a contributor appears. *Source*: Database on Ideology, Money in Politics, and Elections

Taken together, these histograms depict a donorate not composed of serial contributors, but rather individuals supporting single candidates. While this former category of donors certainly exists, they are not the typical contributor, even among those making large contributions. In addition, many donors choose not to contribute again after this intial donation.[8] Recall from section 2 that I estimate regression discontinuities only for individuals that contribute to one candidate. This discussion illustrates that this is not done purely for methodological convenience. Rather, this simply restricts analysis to the modal donor.

## 3.2 Data

### *3.2.1 Data Sources*

This project uses two main sources of data. Data on political contributions by individuals from 1979-2014 are drawn from the Database on Ideology, Money in Politics, and Elections (DIME)[9]. DIME is composed of contribution records collected from the Federal Elections Commission (FEC). These data include the amounts, reporting date and recipient of donations as well as identifying information on contributors such as their names, addresses, occupations and employers. In constructing the dataset, Bonica created unique identifiers to track candidates and contributors over time.[10] These identifiers are used in this project and enable longitudinal analysis of individual contributors.

Election returns from U.S. House and Senate general elections from 1980-2012 come from the CQ Voting and Elections Collection[11]. These data contain the names, candidate status (incumbent/challenger/open seat) and Congressional district or state-level vote totals for major and third party candidates participating in House and Senate general elections.

### *3.2.2 Data Construction and Sample Selection*

Data construction for this project requires a number of important steps, which are outlined in this section. First, DIME contributions data are limited to only individuals giving to House or Senate candidates during the sample period. I aggregate all contributions from a contributor to a candidate in a given cyle into one observation. Campaign committees are required to report contributions totalling more than $200 per election cycle by the Federal

[8]Because DIME only contains contribution records going back to the 1980 election cycle, it is possible that some individuals who make only one large contribution from 1979 to 2014 had also made a contribution before the 1980 cycle.

[9]Available at: `https://data.stanford.edu/dime`

[10]These "Bonica IDs" are constructed algorithmically. More information about the construction of these IDs is available in the DIME documentation, avaiable at: `https://data.stanford.edu/dime`.

[11]Available at: `http://library.cqpress.com/elections/index.php`

Elections Commission. To isolate contributions that meet this criteria, I exclude observations where the total contribution does not exceed $200.

Because I have excluded contributions that total $200 or less, the external validity of results will be limited somewhat. However, the previous sections demonstrates that donations exceeding $200 make up a large fraction of the total contributions received by candidates and are economically relevant themselves. For the remainder of the paper I use phrases such as "make a contribution" or "give to the same candidate" as a shorthand for making a contribution exceeding $200. All dependent variables in the next section are indicators for making such contributions. Thus, it is possible that an individual that I classify as "not making a House contribution" could have given an amount totalling $200 or less to a House candidate. Some of these contributions are reported and appear in DIME, but it is unclear how many do not or what factors lead campaigns to not report such donations. Thus, I consider focusing only on reportable donations a more conservative, and cleaner, approach.

A number of additional data exclusions are made. A small number of observations appear to be PAC, union or corporate contributions miscoded as individual contributions after manual inspection of the data.[12] These observations are excluded. Similarly, contributions made from candidates to themselves are excluded. Of the remaining observations, about 1.5% of the contributor-candidate-cycle observations exceed federal individual contribution limits. These limits, however, are not per cycle but per election. This means that the limits apply separately to total contributions made during primary, general, special and runoff elections. Those observations exceeding the limit in at least one of these election types are flagged and all contributions by a contributor in the violating election cycle are removed.[13]

These contributions data are merged to general election returns from the CQ Press. I only match contributions to Democratic or Republican general election candidates. Matching is done at the candidate-district-cycle level. Candidates are first matched on correspondence of the last name in each dataset. The unmatched observations are then subject to a fuzzy matching procedure using the `R` package `stringdist` to account for slight differences in candidate names across the two datasets.[14] Both fuzzy-matched and unmatched observations are further subject to manual inspection to account for any mistakes or oversights in the matching procedure.

Districts that feature multiple elections in the same cycle are excluded.[15] Any election

[12]Specifically, I drop observations where the Bonica contributor ID is less than 1,000,000.

[13]Results are nearly identical when these datapoints are included.

[14]This issue can arise for a number of different reasons. A candidate's last name may contain a hyphen in the CQ Press data that is missing in the DIME data, for example. Other times first or last names are misspelled or appear in the wrong order in the DIME data. `stringdist` package documentation: https://cran.r-project.org/web/packages/stringdist/stringdist.pdf

[15]This would be the case when there is a general election and also a runoff or special election during the

in which a Democrat and a Republican do not run against one another is excluded, as are elections in which a third party candidate wins.

The sample is then further restricted to those contributors giving to at most one general election candidate (House or Senate) in a given election cycle. One-candidate donors whose candidate runs for the House make up the estimation sample for the House of Representatives. This sample comprises 1,549,619 contributor-cycle observations, 818,141 of which represent contributions to close House elections. Likewise, one-candidate donors whose candidate runs for the Senate make up the estimation sample for the Senate. This sample comprises 964,436 contributor-cycle observations, 683,118 of which contribute to close Senate elections. These samples are summarized in Appendix section A.

# 4 Main Results

This section details results from estimation of equation (1). Section 4.1 presents these results for the sample of House donors. Section 4.2 presents corresponding results for the sample of Senate donors.

## 4.1 House of Representatives

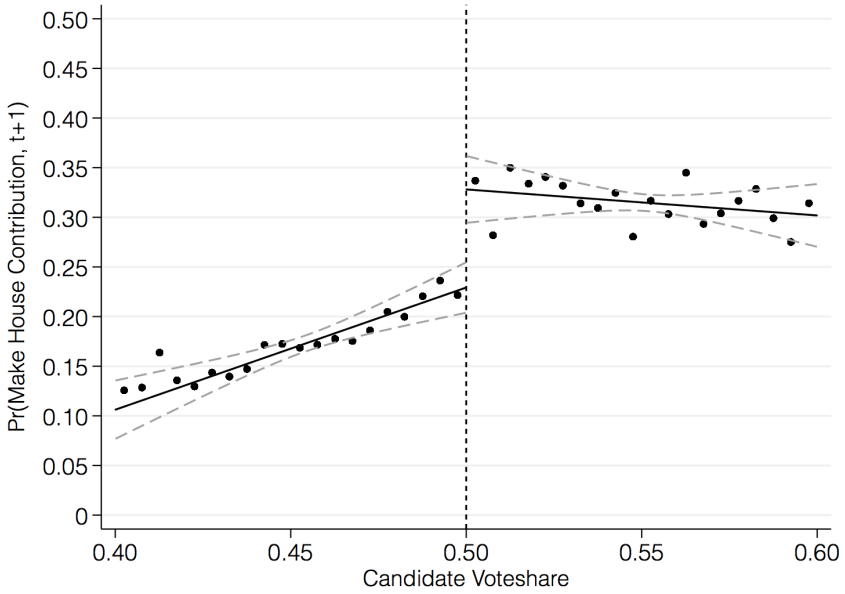
Panel (a) of Figure 2 displays the fraction of donors making a contribution to the House of Representatives in the cycle following their initial contribution. The running variable is the recipient candidate's two-party voteshare. Visible is a large, sharp discontinuity in future giving at the 50% plurality threshold: individuals contributing to a narrowly-losing candidate contribute again at a rate of about 23%, while individuals contributing to narrowly-winning candidate contribute again at a rate of 33%, a 10 percentage point (or roughly 43%) increase. This result is presented in regression form in panel A, column 2 of Table 2.

It is clear from this result that there is a significant difference in the giving behavior of contributors to narrowly-winning and narrowly-losing candidates. A naive interpretation of this result could lead one to believe that there is learning among givers based on the results of their candidates' respective elections. However, panel (b) of Figure 2 complicates this story. Panel (b) shows the fraction of recipient candidates seeking office in the cycle following the close general election. Again, the running variable is the recipient candidate's two-party voteshare. This figure shows that there is a very large discontinuity in the likelihood of candidates running for future office at the 50% plurality threshold. Narrowly-losing candidates will run in the next cycle in about 41% of cases, while narrowly-winning candidates run

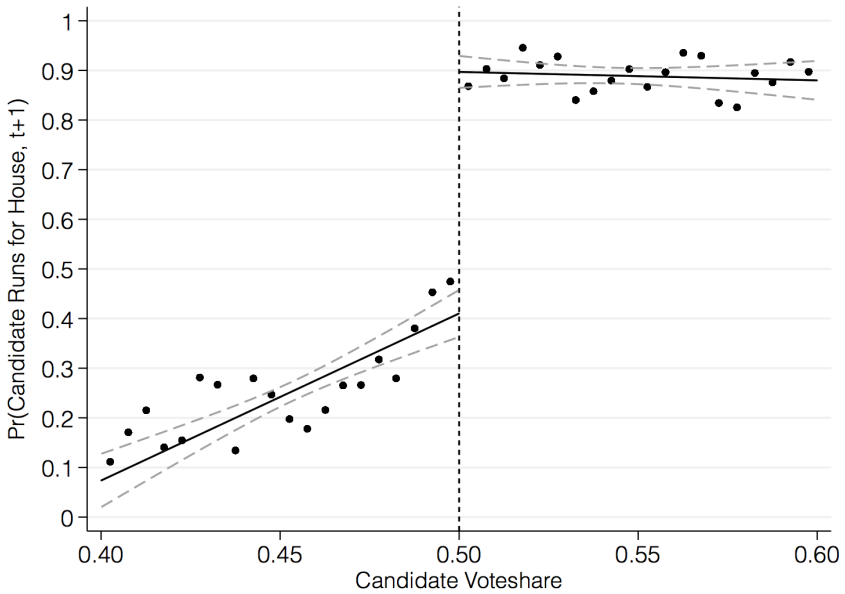
same cycle. This is done because otherwise a contributor may be assigned multiple running variables for gifts to the same candidate in the same cycle.

Figure 2: Regression Discontinuity Estimates

(a) Likelihood of Giving Next Cycle




(b) Likelihood That Candidate Seeks Office




*Notes*: Panel (a) displays the fraction of contributors in each bin making a donation exceeding $200 in cycle $t+1$. The x-axis represents the two-party general election voteshare of the candidate recipient in time $t$. Solid lines are estimated via ordinary least squares using triangular weights. Standard errors clustered at the Congressional district level are represented by dashed lines. Panel (b) displays the fraction of candidates in each bin running in a primary or general election in cycle $t+1$. The x-axis is the candidate's two-party general election voteshare in cycle $t$. Solid lines are estimated via ordinary least squares using triangular weights. Standard errors clustered at the Congressional district level are represented by dashed lines. The bin width for both figures is 0.5 percentage points.

again at a rate of almost 90%. This result is presented in regression form in Panel B, column 2 of Table 2. Thus, while giving behavior is discontinuous through the cutoff, so too is the likelihood of the receipient candidate seeking office. This is unsurprising, as incumbents generally seek (often succesfully) multiple terms in office. This does mean, however, that more careful analysis is required to separate learning (if it exists) from candidate-specific effects. More precisely, because all contributors in the sample give to only one candidate, variation in the continued presence of that candidate could be sufficient to generate this discontinuity in giving. Donors to losing candidates may not find a new candidate they deem worthy of their donations if their original candidate does not run. On the other hand, if their candidate were to win, because they have already made a donation, donors may find the decision to continue to support the candidate a simple one.

Before diving deeper into this issue, I draw attention to the remaining entries of Table 2. These results reveal that both the discontinuity in giving and the discontinuity in running for office are not limited to the period immediately after the close election, but persist for at least two more election cycles. Panel A, column 3 of Table 2 shows that on average contributors to narrowly-losing candidates give again in $t+2$ about 16% of the time, while contributors to narrowly winning candidates give about 22% of the time. In $t$+3, contributors to narrowly-losing and -winning candidates give at rates of 13% and 16%, respectively. Both of these discontinuities are signficant at the 1% level. Panel B shows that the corresponding discontinuities in reelection seeking in cycles $t+2$ and $t+3$ are 48 percentage points (a jump from 16% to 64%) and 41 percentage points (a jump from 12% to 53%), respectively. These estimates are similarly highly significant. Also, note that neither House giving nor the propensity to seek election is discontinuous in the cycle before the close election, as seen in column 1 of Table 2.

To unpack the discontinuity in future giving, I turn to examining giving by recipient candidate. Panels A and B of Table 3 decompose the effects measured in Panel A of 2 by candidate. That is, in Panel A the dependent variable is an indicator for giving to the same candidate as in cycle $t$, while in Panel B the dependent variable is an indicator for giving to a candidate different from the recipient in cycle $t$. The estimates in Panel A show clearly that there are large and highly signficiant discontinuities in the propensity to give to the same candidate in cycles $t+1$ through $t+3$. In $t+1$, for example, donors to narrowly-losing candidates give to their candidate again about 12% of the time, while donors to narrowly-winning candidates give again nearly 28% of the time (a 16 percentage point, or 130%, increase). This coincides with a significant negative discontinuity in giving to new candidates. The second column of Panel B shows that donors to narrowly-losing candidates will give to new candidates in $t+1$ 12% of the time, while donors to narrow winners give

Table 2: Regression Discontinuity Estimates: Effect of Close Candidate Victory on Overall House Giving and Likelihood of Running for House

| | (1) $t-1$ | (2) $t+1$ | (3) $t+2$ | (4) $t+3$ |
|---|---|---|---|---|
| ***Panel A:*** | | | | |
| *Pr(Make House Contribution)* | | | | |
| Candidate Wins | -0.001 | 0.099*** | 0.058*** | 0.033*** |
| | (0.014) | (0.020) | (0.009) | (0.008) |
| Constant | 0.190*** | 0.229*** | 0.155*** | 0.132*** |
| | (0.010) | (0.013) | (0.008) | (0.006) |
| Observations | 807308 | 818141 | 702559 | 583824 |
| Contributors | 678182 | 687539 | 598615 | 502515 |
| Elections | 1854 | 1984 | 1843 | 1690 |
| ***Panel B:*** | | | | |
| *Pr(Candidate Runs for House)* | | | | |
| Candidate Wins | -0.013 | 0.485*** | 0.482*** | 0.410*** |
| | (0.039) | (0.029) | (0.036) | (0.037) |
| Constant | 0.438*** | 0.412*** | 0.162*** | 0.122*** |
| | (0.025) | (0.024) | (0.020) | (0.018) |
| Observations | 3495 | 3726 | 3448 | 3146 |
| Elections | 1854 | 1984 | 1843 | 1690 |

*Notes*: Panel A displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution to a House candidate exceeding $200 in cycle indicated in the column heading. Panel B displays results of estimation of equation (2) with the dependent variable being an indicator of a candidate running in a primary or general election campaign in the cycle indicated in the column heading. In both cases, regressions are estimated with triangular weights and slope coefficients are omitted. Robust standard errors for all regressions are clustered at the congressional district level and are presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 3: Regression Discontinuity Estimates: Effect of Close Candidate Victory on Giving By Candidate (House)

| | (1) $t-1$ | (2) $t+1$ | (3) $t+2$ | (4) $t+3$ |
|---|---|---|---|---|
| ***Panel A:*** | | | | |
| *Pr(Give to Same Candidate)* | | | | |
| Candidate Wins | 0.005 | 0.156*** | 0.088*** | 0.057*** |
| | (0.017) | (0.022) | (0.013) | (0.011) |
| Constant | 0.119*** | 0.121*** | 0.044*** | 0.024*** |
| | (0.011) | (0.014) | (0.008) | (0.005) |
| ***Panel B:*** | | | | |
| *Pr(Give to New Candidate)* | | | | |
| Candidate Wins | -0.006 | -0.039*** | -0.018*** | -0.015*** |
| | (0.006) | (0.007) | (0.006) | (0.005) |
| Constant | 0.087*** | 0.123*** | 0.119*** | 0.113*** |
| | (0.005) | (0.006) | (0.005) | (0.005) |
| Observations | 807308 | 818141 | 702559 | 583824 |
| Contributors | 678182 | 687539 | 598615 | 502515 |
| Elections | 1854 | 1984 | 1843 | 1690 |

*Notes*: Panel A displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution exceeding $200 to the same candidate from cycle $t$ in the cycle indicated in the column heading. Panel B displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution exceeding $200 to a candidate other than the cycle $t$ candidate in the cycle indicated in the column heading. In both cases, regressions are estimated with triangular weights and slope coefficients are omitted. Robust standard errors for all regressions are clustered at the congressional district level and are presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

to new candidates only about 8% of the time. Negative discontinuities also persist through $t+3$. None of these discontinuities exist in the cycle prior to the close election, so none of these results appear to be driven by past discrepencies in giving behavior.

I now further restrict the analysis to the district of the initial contribution. Table 4 reports results for when the dependent variable is either an indicator of giving to a candidate in same district as the cycle $t$ contribution in a future cycle (Panel A), giving to the same candidate in the same district (Panel B), or giving to a new candidate in the same district (Panel C).[16] Column 2 of Table 4 shows an estimated discontinuity in giving to the same district in cycle $t+1$ of 10.5 percentage points. This discontinuity is very close in magnitude to the overall discontinuity in giving from Table 2. Panels B and C show that this discontinuity is composed of a 15.2 percentage point jump in giving to the same candidate within the same district, and a 4.6 percentage point drop in giving to new candidates within the same district. As with the estimates of overall giving and giving by candidate from above, this pattern persists in cycles $t+2$ and $t+3$. Additionally, as with the previous results, no significant discontinuities are found in cycle $t-1$ giving.

Table 5 presents results for future giving to the Senate and new districts. In Panel A the dependent variable is an indicator for making a Senate contribution in a future cycle, while Panel B's dependent variable is an indicator for making a future contribution to candidate in a district different from the district of the recipient in cycle $t$. Recall that all contributors in the estimation sample only give to one candidate, with that candidate running for the House. Thus, none of the contributors in the sample make a Senate contribution in cycle $t$. In the two cycles following the close election, there is no estimated discontinuity in giving to the Senate and coefficients on candidate victory are very close to zero, as seen in columns 2 and 3 of Panel A of table 5. However, column 4 shows a marginally significant uptick in Senate giving among winning-candidate contributors in $t+3$. In this future cycle, contributors to winning candidates are 1.2 percentage points more likely to give to the Senate than their counterparts contributing to losing candidates. Interestingly, this result is potentially explained by a concurrent and statistically signficant uptick in candidates winning close elections in time $t$ transitioning to running for the Senate in time $t+3$. This result is shown

[16]Note that here the sample is smaller for all time periods than for those regressions in Table 2. This is because decenniel redistricting alters the boundaries of Congressional districts. Congressional district borders are redrawn following the decenniel Census. Thus, the years in which "new" Congresssional district borders come into effect during our sample period are years ending in 2: 1982, 1992, 2002 and 2012. This will naturally decrease the sample size, as it shortens the window over which analysis of district giving behavior is possible. This also results in discrepancies in the exact magnitudes of estimated effects across the two samples. However, these discrepencies are small. In no case is the direction or significance, and thus the interpretation, of estimated effects different. Results of all regressions estimated over a fully balanced panel are presented in appendix table 17.

Table 4: Regression Discontinuity Estimates: Effect of Close Candidate Victory on Giving Within District (House)

| | (1) $t-1$ | (2) $t+1$ | (3) $t+2$ | (4) $t+3$ |
|---|---|---|---|---|
| ***Panel A:*** | | | | |
| *Pr(Give to Same District)* | | | | |
| Candidate Wins | -0.026 | 0.104*** | 0.063*** | 0.048*** |
| | (0.019) | (0.027) | (0.011) | (0.012) |
| Constant | 0.166*** | 0.186*** | 0.106*** | 0.074*** |
| | (0.015) | (0.019) | (0.010) | (0.009) |
| ***Panel B:*** | | | | |
| *Pr(Give to Same Cand. in Same Dist.)* | | | | |
| Candidate Wins | -0.023 | 0.152*** | 0.093*** | 0.065*** |
| | (0.024) | (0.027) | (0.015) | (0.013) |
| Constant | 0.137*** | 0.123*** | 0.037*** | 0.022*** |
| | (0.017) | (0.017) | (0.010) | (0.008) |
| ***Panel C:*** | | | | |
| *Pr(Give to New Cand. in Same Dist.)* | | | | |
| Candidate Wins | -0.002 | -0.046*** | -0.030*** | -0.019** |
| | (0.007) | (0.009) | (0.009) | (0.008) |
| Constant | 0.032*** | 0.066*** | 0.070*** | 0.052*** |
| | (0.005) | (0.008) | (0.007) | (0.006) |
| Observations | 393446 | 607370 | 343772 | 198553 |
| Contributors | 352191 | 533526 | 313348 | 188676 |
| Elections | 984 | 1497 | 1060 | 713 |

*Notes*: Panel A displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution exceeding $200 to a candidate in the same district as the cycle $t$ candidate in the cycle indicated in the column heading. Panel B displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution exceeding $200 to the cycle $t$ candidate in the same district as the cycle $t$ candidate in the cycle indicated in the column heading. Panel C displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution exceeding $200 to a canddiate other than the cycle $t$ candidate in the same district as the cycle $t$ candidate in the cycle indicated in the column heading. In all cases, regressions are estimated with triangular weights and slope coefficients are omitted. Robust standard errors for all regressions are clustered at the congressional district level and are presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Regression Discontinuity Estimates: Effect of Close Candidate Victory on Giving to Senate and to Other Districts (House)

| | (1) $t-1$ | (2) $t+1$ | (3) $t+2$ | (4) $t+3$ |
|---|---|---|---|---|
| ***Panel A:*** | | | | |
| *Pr(Make Senate Contribution)* | | | | |
| Candidate Wins | -0.001 | 0.002 | -0.002 | 0.012* |
| | (0.008) | (0.005) | (0.005) | (0.006) |
| Constant | 0.078*** | 0.079*** | 0.083*** | 0.067*** |
| | (0.007) | (0.005) | (0.005) | (0.004) |
| Observations | 807308 | 818141 | 702559 | 583824 |
| Contributors | 678182 | 687539 | 598615 | 502515 |
| Elections | 1854 | 1984 | 1843 | 1690 |
| ***Panel B:*** | | | | |
| *Pr(Give to New District)* | | | | |
| Candidate Wins | -0.002 | -0.003 | -0.004 | 0.000 |
| | (0.004) | (0.004) | (0.006) | (0.007) |
| Constant | 0.053*** | 0.069*** | 0.072*** | 0.067*** |
| | (0.003) | (0.004) | (0.005) | (0.006) |
| Observations | 393446 | 607370 | 343772 | 198553 |
| Contributors | 352191 | 533526 | 313348 | 188676 |
| Elections | 984 | 1497 | 1060 | 713 |

*Notes*: Panel A displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution exceeding $200 to a Senate candidate in the cycle indicated in the column heading. Panel B displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution exceeding $200 to a candidate in a district other than that of the cycle $t$ candidate in the cycle indicated in the column heading. In both cases, regressions are estimated with triangular weights and slope coefficients are omitted. Robust standard errors for all regressions are clustered at the congressional district level and are presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

in Appendix table 12. Panel B shows that no estimated discontinuity exists in future giving to new districts in any of the cycles examined. All coefficients on candidate victory are close to zero. Lastly, as with previous estimates, there appear to be no signficant differences in giving in either of these categories in the cycle preceding the close election.

The discontinuities in future giving to the same candidate presented above are strong evidence that the discontinuity in candidate office-seeking is a signficant driver of future contributions. However, this does not necessarily preclude behavioral effects from election results themselves. Recall that more than 40% of losing candidates in close elections seek reelection in the following cycle. It remains unclear if contributors to these candidates display different future contribution patterns than contributors to their winning counterparts. Because I do not have additional exogenous variation in whether a candidate chooses to run following a close election, I cannot answer this question causally. Instead, I undertake a descriptive analysis of behavior near the cutoff that suggests the absence of additional behavioral effects.

Table 6: Descriptive Analysis: Conditional Means at the Cutoff

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| | Candidate Runs, $t+1$ | | Does Not Run, $t+1$ | |
| | After Loss | After Win | After Loss | After Win |
| Pr(Make House Contribution, $t+1$) | 0.359 | 0.330 | 0.147 | 0.308 |
| Pr(Give to Same Candidate, $t+1$) | 0.307 | 0.286 | 0.005 | 0.197 |
| Pr(Give to New Candidate, $t+1$) | 0.088 | 0.078 | 0.144 | 0.136 |
| Pr(Give to Same District, $t+1$) | 0.331 | 0.292 | 0.093 | 0.281 |
| Pr(Give to Same Cand. in Same Dist., $t+1$) | 0.307 | 0.283 | 0.005 | 0.220 |
| Pr(Give to New Cand. in Same Dist., $t+1$) | 0.031 | 0.014 | 0.088 | 0.061 |
| Pr(Give to New District, $t+1$) | 0.064 | 0.065 | 0.071 | 0.069 |
| Pr(Make Senate Contribution, $t+1$) | 0.068 | 0.077 | 0.085 | 0.112 |

*Notes*: Entries in columns (1) and (2) are results from estimation of equation (1) conditioning on the recipient candidate running in a primary or general election in cycle $t+1$. Column (1) entries are the estimated constant terms and column (2) are the result of addition of the constant term and $\tau$ coefficient. Entries in columns (3) and (4) are results from estimation of equation (1) conditioning on the recipient candidate not running in a primary or general election in cycle $t+1$. Column (3) entries are the estimated constant terms and column (4) are the result of addition of the constant term and $\tau$ coefficient. The dependent variable in each regression is described in each row. No entries in column (1) and (2) are statistically different at the 5% level. All entries in columns (3) and (4) statistically different at the 5% level except Give to New Candidate, Give to New Cand. in Same Dist., Give to New District and Make Senate Contribution.

To do this, I estimate two additional sets of regression discontinuity regressions. In the first, I limit the sample to only those individuals contributing to candidates that choose to

run again in the following cycle. In the second, I restrict the sample to only those individuals contributing to candidates that do not run again. Otherwise, the regressions are the same as those above and use the same dependent variables. Table 6 presents the results to these regressions translated into estimates of conditional means at cutoff. Column 1 reports the mean of each dependent variable for those individuals contributing to losing candidates that run again, column 2 reports these values for contributors to winning candidates that run again, while columns 3 and 4 report these values for contributors to losing and winning candidates that do not run again, respectively. In the first row of Table 6, the dependent variable is an indicator for making any house contribution in cycle $t+1$. Contributors to losing candidates that seek future office contribute again about 36% of the time, while contributors to winning candidates contribute again at a similar rate of 33%. When their candidate does not run again, contributors to losing candidates only give again about 14% of the time, a drop of 22 percentage points. Interestingly, in the cases where winning candidates do not seek reelection, their donors still contribute at a relatively high rate of 30%. The remaining rows of 6 show why this is the case. Row 2 shows results for when the dependent variable is giving again to the same candidate. As in row 1, regardless of whether the candidate won or lost, when the candidate runs again, about 30% of contributors will make another donation. When the candidate does not run, however, this changes. When a candidate loses and does not seek reelection, the percent of repeat contributors is virtually zero. However, winning candidates that do not run again will receive contributions from about 20% of their previous contributors. I interpret this as a result of the requirements of being a member of congress. Many members of congress (especially junior members) are under continual pressure to raise funds.[17] Thus, before they eventually make the decision not to run, sitting congressmen have likely made appeals to past donors for contributions for a prospective reelection campaign. It also appears that when candidates run again, their contributors are less likely to give to new candidates, specifically in their district, as evidenced by rows 3 and 6. Consistent with the previous results, giving to new districts appears largely orthogonal to whether or not the original recipient candidate seeks office. Lastly, there appears to be an uptick in giving to the Senate when winning candidates do not run for reelection in the House. About 23% of these candidates run for Senate, compared to less than 1% of losing House candidates that do not run another House campaign. This discontinuity seems sufficient to generate this jump in Senate giving.

Taken together, these results paint a clear picture of giving behavior following close House elections. A large discontinuity exists in future giving to the House between contributors to

[17]Reports have said that the average congressman spends more than half of their time raising funds (O'Donnell, 2016).

winning candidates and those to losing candidates. Much of this discontinuity is the result of increased giving to the same candidate in future cycles. Further, the candidate's continued presence seems to crowd out gifts to new candidates, specifically within the district of their original contribution. Contributors to candidates that seek future office, regardless of the results of the election, exhibit similar contribution patterns, specifically a higher likelihood of contributing to their candidate in the future. Further, any apparent spillovers to the Senate also seem to be driven by discontinuous Senate office-seeking by winners. Thus, it is likely that the discontinuity in overall giving is driven by the large discontinuity in the likelihood of candidates running again following close elections.

### 4.2 Senate

This section reports results for contributors to the Senate, which largely reaffirm the House results above. Again, note that time periods are defined here as they in the House analysis. Thus, a winning candidate will usually not run again following a close election in cycle $t$ until cycle $t+3$, as Senate terms last 6 years. Table 7 reports regression discontinuity estimates for giving to the Senate in future cycles (Panel A) and the likelihood the candidate runs for office (Panel B). As expected, given the House results from above, there is significant positive jump in making a Senate contribution in cycle $t+3$, coinciding with a large jump in the likelihood the candidate seeks reelection (presented in column 4 of Panels A and B, respectively). Contributors to time $t$ narrowly losing candidates contribute in time $t+3$ at a rate of 12%, while contributors to narrowly winning candidates contribute at a rate of about 19%. The candidates that narrowly lose in time $t$ seek reelection in cycle $t+3$ about 8% of the time, while narrowly winning candidates, now incumbents, seek reelection about 80% of the time.

There are a small, but significant discontinuities in giving by contributors in cycles $t+1$ and $t+2$, while no such discontinuity exists for candidates seeking office in those cycles, as evidenced by columns 2 and 3 of table 7. Contributors to narrowly-winning candidates are 3.4 and 3.5 percentage points more likely to contribute in cycles $t+1$ and $t+2$, respectively, than contributors to narrowly losing candidates. Narrowly winning candidates are less likely than narrowly losing candidates to run for Senate in cycles $t+1$ and $t+2$ by about 2.2 percentage points, though this results is not significant and losing candidates only seek office 4 to 5 five percent of the time during these cycles. While this appears consistent with a behavioral response outside of candidate effects, it could also be driven by Senators beginning to fundraise for a cycle $t+3$ campaign in the intervening cycles.

To tease apart these competing explanations, I present results by candidate in table 8. These results suggest a story in line with the House results. Column 4 shows results for

Table 7: Regression Discontinuity Estimates: Effect of Close Candidate Victory on Overall Senate Giving and Likelihood of Running for Senate

| | (1) $t-1$ | (2) $t+1$ | (3) $t+2$ | (4) $t+3$ |
|---|---|---|---|---|
| ***Panel A:*** | | | | |
| *Pr(Make Senate Contribution)* | | | | |
| Candidate Wins | -0.002 | 0.034*** | 0.035*** | 0.066*** |
| | (0.013) | (0.012) | (0.008) | (0.010) |
| Constant | 0.105*** | 0.103*** | 0.091*** | 0.119*** |
| | (0.012) | (0.009) | (0.008) | (0.007) |
| Observations | 671230 | 683118 | 619836 | 549817 |
| Contributors | 603076 | 613520 | 558645 | 558645 |
| Elections | 256 | 279 | 262 | 262 |
| ***Panel B:*** | | | | |
| *Pr(Candidate Runs for Senate)* | | | | |
| Candidate Wins | 0.025 | -0.022 | -0.022 | 0.710*** |
| | (0.038) | (0.027) | (0.033) | (0.070) |
| Constant | 0.018 | 0.040* | 0.049* | 0.084*** |
| | (0.014) | (0.022) | (0.026) | (0.028) |
| Observations | 446 | 483 | 455 | 427 |
| Elections | 256 | 279 | 262 | 247 |

*Notes*: Panel A displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution to a Senate candidate exceeding $200 in cycle indicated in the column heading. Panel B displays results of estimation of equation (2) with the dependent variable being an indicator of a candidate running in a Senate primary or general election campaign in the cycle indicated in the column heading. In both cases, regressions are estimated with triangular weights and slope coefficients are omitted. Robust standard errors for all regressions are clustered at the state level and are presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 8: Regression Discontinuity Estimates: Effect of Close Candidate Victory on Giving By Candidate (Senate)

| | (1) $t-1$ | (2) $t+1$ | (3) $t+2$ | (4) $t+3$ |
|---|---|---|---|---|
| ***Panel A:*** | | | | |
| *Pr(Give to Same Candidate)* | | | | |
| Candidate Wins | -0.004 | 0.023** | 0.038*** | 0.109*** |
| | (0.014) | (0.009) | (0.008) | (0.016) |
| Constant | 0.032*** | 0.013** | 0.007** | 0.016*** |
| | (0.009) | (0.006) | (0.003) | (0.006) |
| ***Panel B:*** | | | | |
| *Pr(Give to New Candidate)* | | | | |
| Candidate Wins | 0.002 | 0.016* | 0.005 | -0.033*** |
| | (0.009) | (0.009) | (0.008) | (0.010) |
| Constant | 0.079*** | 0.092*** | 0.085*** | 0.106*** |
| | (0.009) | (0.006) | (0.008) | (0.007) |
| Observations | 671230 | 683118 | 619836 | 549817 |
| Contributors | 603076 | 613520 | 558645 | 498400 |
| Elections | 256 | 279 | 262 | 247 |

*Notes*: Panel A displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution exceeding $200 to the same candidate from cycle $t$ in the cycle indicated in the column heading. Panel B displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution exceeding $200 to a Senate candidate other than the cycle $t$ candidate in the cycle indicated in the column heading. In both cases, regressions are estimated with triangular weights and slope coefficients are omitted. Robust standard errors for all regressions are clustered at the state level and are presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

cycle $t+3$. In cycles $t+3$, contributors to narrowly winning candidates in time $t$ are 10.6 percentage points more likely to make a contribution to the same candidate than contributors to narrowly losing candidates. Further, in cycle $t+3$, contributors to narrowly winning candidates are 3.3 percentage points less likely to give to new candidates than contributors to narrowly losing candidates. Columns 2 and 3 show results for cycles $t+1$ and $t+2$. Panel A shows that, despite their candidates rarely actively seeking office in cycles $t+1$ and $t+2$, contributors to narrowly candidates make new contributions to these candidates. In cycle $t+1$, contributors to narrowly-winning candidates are 2.3 percentage points more likely to make a contribution to their candidate. In cycle $t+2$, they are 3.8 percentage points more likely to do so. There does not appear to much of an effect in terms of giving to new candidates. Panel B shows that contributors to narrowly winning candidates are 1.6 percentage points more likely to give to a new candidate in cycle $t+1$ than contributors to narrowly losing candidates, though this difference is only marginally significant.[18] In cycle $t+2$, these contributors are only 0.5 percentage points more likely to make such a contribution and the difference it not signficant.

The interpretation of these results is rather straightforward. While winning Senate candidates do not run for reelection until cycle $t+3$, they may still begin collecting donations for a prospective reelection campaign soon after their election.[19] This starts in the cycle immediately following the close election, seems to pick up somewhat in cycle $t+2$ and significantly intensifies in cycle $t+3$.

In Appendix section B, I report results for giving within the state of the original contribution, giving to the House and giving to new states. These results corroborate findings from the House: effects are concentrated within state and there are no estimated spillovers to other states or giving to the House.

## 5 Consequences for the Incumbency Advantage

While there is little evidence of behavioral effects in political contributions by individuals, the candidate effects demonstrated above have significant implications for campaign fundraising. Individuals respond when a candidate they have shown previous interest in seeks office again. When a candidate loses, while some of their donors will support a new candidate in the same district, many do not. This suggests that winning candidates have a pool of past donors from which they can draw new contributions that is larger than that of

[18]Further, this result is not significant when estimation is done using a balanced panel of contributors (Appendix table 18) or using narrower bandwidths (Appendix tables 21 and 22).

[19]This echoes the result from above where Congressmen that eventually decide not to seek reelection still show receive significant contributions from their past donors.

a prospective challenger. This implies an incumbency advantage in individual contributions. In this section, I show the existence and estimate the magnitude of such an advantage.

Past research has shown the existence of a financial incumbency advantage, driven largely by interest groups. Fouirnaies and Hall (2014) show that there is also an advantage among consumption-oriented donors such as individuals and ideological PACs, but their analysis does not separate these groups. Thus, it is unclear how much of this advantage comes specifically from an advantage among individuals. Further, the role of repeat donors in shaping this advantage is unknown.

To demonstrate and quantify a financial incumbency advantage from individuals, I follow Fouirnaies and Hall (2014) in undertaking a party-district-level analysis. I aggregate all contributions from individuals to the parties of their recipients (either Democratic and Republican) within a particular district.[20] I again use a regression discontinuity design to compare the totals and district shares of contributions to the two parties in the cycle following a close election.[21] I do this both for all donations to candidates within the district and those donations coming from individuals who previously contributed during the close election.

I estimate regressions of the form:

$$\begin{aligned} y_{p,d,t+1} = \alpha + \tau \text{PartyWin}_{p,d,t} + \beta_1 \text{PartyVoteshare}_{p,d,t} \\ + \beta_2 (\text{PartyWin}_{p,d,t} \times \text{PartyVoteshare}_{p,d,t}) + \varepsilon_{p,d,t+1} \end{aligned} \tag{3}$$

where $y_{p,d,t+1}$ is an outcome of interest for party $p$, in district $d$, in cycle $t+1$, $\text{PartyVoteshare}_{p,d,t}$ is the (normalized) two-party voteshare of party $p$'s candidate, in district $d$, in election cycle $t$, and $\text{PartyWin}_{c,t}$ is an indicator taking value 1 if party $p$'s candidate wins.

There are four outcomes of interest used for $y_{p,d,t+1}$. The first is "Party Share," which is the party's share of contributions to all candidates in district $d$ in cycle $t+1$. Specifically, Party Share is defined as:

$$\text{Party Share}_{p,d,t+1} = \frac{\text{Party Total}_{p,d,t+1}}{\text{District Total}_{d,t+1}}$$

where "Party Total" is the total dollar amount of all contributions to candidates from party

[20] Again, because I do not observe contributions that total less than \$200, I can only aggregate contributions exceeding \$200. Thus, all totals are totals of large contributions only

[21] Here, there are two observations per district, one for the Democratic party and one for the Republican party. Often analysis of this sort only utilizes observations from one of the parties per district. However, this only results in an estimate of a discontinuity for when that party wins, rather than a weighted average of the discontinuity estimates for both parties. The results to come are robust to making this decision. Estimates only for the Democratic party can be seen in appendix table 16.

$p$ in district $d$ in cycle $t+1$ and "District Total" is the total dollar amount of all contributions to candidates in district $d$ in cycle $t+1$, regardless of their party. The second outcome of interest is "Party Repeat Share," defined as:

$$\text{Party Repeat Share}_{p,d,t+1} = \frac{\text{Party Repeat Total}_{p,d,t+1}}{\text{District Total}_{d,t+1}}$$

where "Party Repeat Total" is the total dollar amount of all contributions to candidates from party $p$ in district $d$ in cycle $t+1$ that come from individuals who previously donated to district $d$ in cycle $t$. The other two outcomes of interest are Party Total and Party Repeat Total, which are defined above.

I restrict the analysis to those districts where there are positive total contributions and to consecutive cycles not affected by redistricting.[22] As with previous regressions, I utilize a bandwidth of 10 percentage points and trangular weights.[23] Standard errors are clustered at the Congressional district level.

### 5.1 Incumbency Results

Figure 3 shows visually the results for Party Share and Party Repeat Share. Panel (a) shows a sharp discontinuity in Party Share following a close election. Candidates from narrowly-losing parties receive about 44% of the district's individual contributions in cycle $t+1$ while candidates from narrowly-winning parties receive 56% of future donations. This 12 percentage point jump is signficant at the 1% level. Panel (b) displays a similar sharp discontinuity in Party Repeat Share. Repeat contributions as a share of all district contributions are about 11% for narrowly-losing parties, while they are 21% for narrowly-winning parties. This 10 percentage point increase is also signficant at the 1% level.

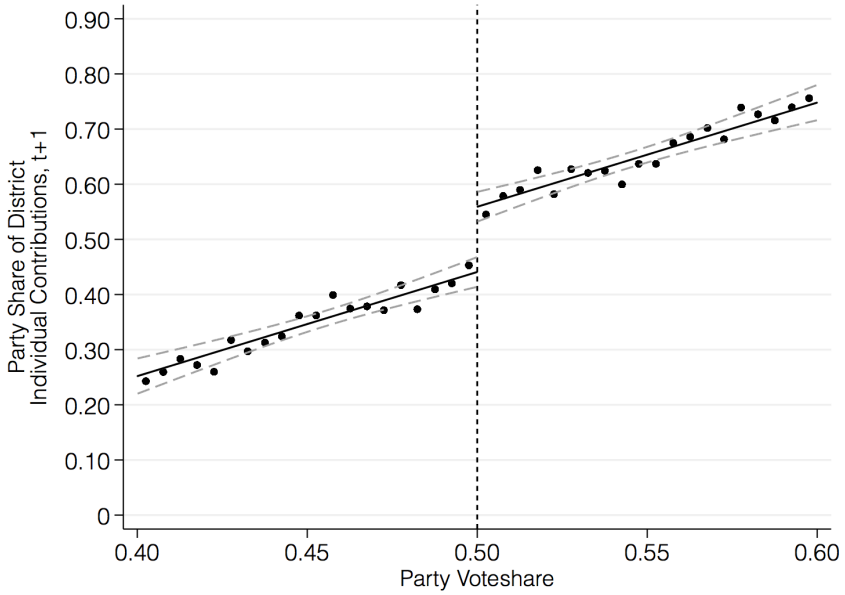
Table 9 shows these results in regression form in columns 1 and 2. Results for Party Total and Party Repeat Total are reported in columns 3 and 4. Column 3 shows candidates from narrowly losing parties receive about $580,000 in total contributions, while candidates from narrowly-winning parties receive $710,000 (a $130,000 or 22% increase). In 2014 the average Democratic general election candidate to the House of Representatives recieved about $600,000 from individual contributions, so the estimates above constitute a sizable advantage. Column 4 reveals that almost all of this advantage is delivered by repeat donors. Candidates from narrowly-losing parties receive about $172,000 from repeat contributors, while candidates in narrowly-winning parties receive about $296,000 (a $124,000 or 72%

[22] See footnote 16.

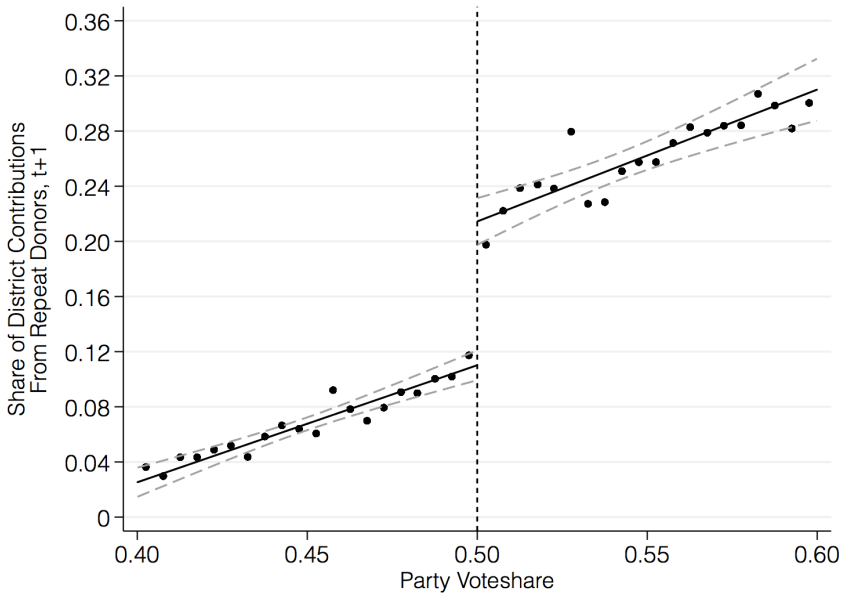
[23] See appendix tables 23 and 24 for results from estimation using a rectangular kernel and other bandwidths.

Figure 3: Regression Discontinuity Estimates: Incumbency Advantage

(a) Share of District Contributions




(b) Share of District Repeat Contributions




*Notes*: Panel (a) displays the average value by bin of Party Share, defined above, in cycle $t+1$. The x-axis represents the two-party general election voteshare of the party's candidate in time $t$. Solid lines are estimated via ordinary least squares using triangular weights. Standard errors clustered at the Congressional district level are represented by dashed lines. Panel (b) displays the the average value by bin of Party Repeat Share, defined above, in cycle $t+1$. The x-axis is the two-party general election voteshare of the party's candidate in cycle $t$. Solid lines are estimated via ordinary least squares using triangular weights. Standard errors clustered at the Congressional district level are represented by dashed lines. The bin width for both figures is 0.5 percentage points.

Table 9: Regression Discontinuity Estimates: Effect of Party Victory on Party Contributions Next Cycle

| | (1) Party Share | (2) Party Repeat Share | (3) Party Total | (4) Party Repeat Total |
|---|---|---|---|---|
| Party Win | 0.118*** | 0.104*** | 130.660*** | 124.375*** |
| | (0.027) | (0.011) | (30.357) | (14.515) |
| Constant | 0.441*** | 0.110*** | 580.785*** | 172.458*** |
| | (0.014) | (0.005) | (38.724) | (14.997) |
| Observations | 3004 | 3004 | 3004 | 3004 |
| Elections | 1502 | 1502 | 1502 | 1502 |
| Districts | 831 | 831 | 831 | 831 |

*Notes*: Entries are coefficients resulting from estimation of equation (3) with the dependent variables indicated by column headings, all of which are defined above. In all cases, regressions are estimated with triangular weights and slope coefficients are omitted. Robust standard errors for all regressions are clustered at the Congressional district level and are presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

increase). Both of these discontinuities are significant at the 1% level. Appendix table 15 shows that none of these variables are discontinuous through the cutoff during cycle $t$.

These results show that there exists a significant incumbency advantage in terms of individual contributions. Almost all of this advantage comes from an advantage among repeat donors. In light of the results in sections 4.1 and 4.2, it is clear that this is due to candidate effects. Winning parties have the advantage of continuity in candidates, which I have shown to be important in determining future contributions from individuals. Losing parties will often run a new candidate to challenge the incumbent, which seems to in itself guarantee drop off in the base of financial support.

## 6 Conclusion

In this paper, I provide strong evidence that election results have a significant effect on the future campaign contributions of individuals. Contributors to winning House candidates are nearly 10 percentage points more to make a contribution in the next election cycle than contributors to losing candidates. However, rather than confirming that reinforcement learning is to blame, I show that it is the effect election results have on candidates, and which candidates seek office, that drive contributions. This analysis in the House is corroborated by similar findings in the Senate.

While reinforcement learning appears not be at play, these results have important implications for the financial incumbency advantage. Incumbents can leverage prior connections

to donors that fresh challengers do not possess. I estimate a significant financial incumbency advantage in terms of individual contributions, almost all of which comes from these previously involved donors.

Taken together these findings raise more questions about political participation and the incumbency advantage. Specifically, do these patterns carry over to other forms of political participation, particularly voting? There is some evidence suggesting that voting for a particular candidate engenders more positive future opinions of that candidate (Mullainathan and Washington, 2009). This could generate similar effects if past voters are more inclined to turnout simply by having voted for an incumbent in the past, especially if they face a new challenger. This would also imply that at least some of the incumbency advantage is due to candidate effects that induce differential turnout among previous voters.

Relatedly, while the motivations behind contributing and voting may be similar, contributors and voters have been shown, on average, to be very different groups. Donors are generally less diverse, older, wealthier and more educated than voters (Hill and Huber, 2017). Thus, the possibility remains that reinforcement learning could manifest in voting behavior, even if it does not appear to be present in contributions behavior.

Despite demographic differences between contributors and voters, however, the figures in section 3.1 detail a surprisingly "casual" donorate, in which individuals often only make one donation during their political life. This seems at odds with the common understanding of political contributors, especially considering that these individuals are making large enough contributions to require reporting. The results presented here can account for some, but not all, of this dropoff in giving. More research is required to understand why more donors do not continue to contribute after their initial donation.

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## Appendix A Summary Statistics

Summary statistics for all one-candidate House contributors and those giving to close elections are presented in Table 10. For the most part, these two samples look similar in terms of their average characteristics. In both samples, the average total contribution is about $1000 (real 2014 USD). About 25% of donors make a contribution in the next election cycle (two years later). The majority of these donors give to their time $t$ recipient candidate in the next cycle (about 70% of repeat givers and 17% of the overall sample), while 40% of repeat donors (10% overall) give to a new candidate in the next cycle. The distribution of subsequent giving, also, is similar across these samples. The vast majority of next cycle donations go to the same district. 21% of individuals give to the same district in the next cycle (more than 80% of repeat givers), while 7% of individuals give to a new district (about 30% or repeat givers).

The main differences across these samples appear in the latter half of Table 10. First, average recipient candidate voteshare is 57% in the sample of givers to all elections, while only 51% in the sample of close-election contributors. Similarly, the likelihood of recipient candidate victory is higher in the larger sample (66% compared to 55%). Recipients in the larger sample are more often Republican, though only negligibly so (48% compared to 47%). The larger pool of donors more often give to incumbent candidates. About 58% of donations in the larger sample go to incumbents, compared to 45% going to incumbents in close elections. Finally, the likelihood of the recipient candidate running again in the next cycle is higher in the larger sample at 67% compared to the 60% figure in close elections.

Summary statistics for Senate contributors are presented in Table 11. The average contribution here, in both the larger sample and donors to close elections, is higher than that of the House samples at about $1130. The propensity to contribute in cycle $t+1$ is significantly lower in the Senate samples, with Senate contributors participating about half as much as House contributors at 12%. Note, however, that time periods here are defined as they are in the House. So, while there always be a House election in an individual's district in period $t+1$, there will not necessarily be a Senate election in an individual's state in $t+1$. Further, given that a large fraction of repeat donors in our House samples continue to give to the same candidate, the fact that few candidates run for Senate in consecutive election cycles (2-3%, from the last row of Table 11) helps explain this difference. This also explains why Senate contributors give more often to new candidates than their House counterparts. Senate contributors give to the same candidate in $t+1$ only about 2% of the time, while giving to new candidates at a rate of 10%. Future giving is also less focused in the same locality as the initial gift. Senate contributors give again to the same state 7% of the time (about 60%

Table 10: Summary Statistics for House Donors

| | All Elections | Close Elections |
|---|---|---|
| Contribution Amount ($) | 1006.53 | 1016.24 |
| | [892.54] | [925.17] |
| Make House Contribution, $t+1$ | 0.26 | 0.25 |
| | [0.44] | [0.43] |
| Give to Same Candidate, $t+1$ | 0.18 | 0.17 |
| | [0.39] | [0.38] |
| Give to New Candidate, $t+1$ | 0.10 | 0.10 |
| | [0.29] | [0.30] |
| Give to Same District, $t+1$ | 0.21 | 0.21 |
| | [0.41] | [0.41] |
| Give to New District, $t+1$ | 0.07 | 0.07 |
| | [0.26] | [0.26] |
| Candidate Voteshare | 0.57 | 0.51 |
| | [0.12] | [0.05] |
| Candidate Wins | 0.68 | 0.55 |
| | [0.47] | [0.50] |
| Democrat Recipient | 0.48 | 0.47 |
| | [0.50] | [0.50] |
| Incumbent Recipient | 0.58 | 0.45 |
| | [0.49] | [0.50] |
| Candidate Runs for House, $t+1$ | 0.67 | 0.60 |
| | [0.47] | [0.49] |
| Observations | 1549619 | 818141 |

*Notes*: Contribution records are collapsed to the contributor-candidate-cycle level. Those observations where the total contribution does not exceed $200 are excluded. Observations with Bonica CID less than 1,000,000 are excluded (potential PAC, union or firm contributions). Contributions from candidates to their own campaigns are excluded. Contributions from contributors where total contributions to any single election exceed Federal limits are excluded. Candidates matched to CQ Press general election returns by last name, then fuzzy matched on last name and inspected manually for errors. Sample restricted to only individuals donating to one candidate in a cycle and that candidate seeks election in the House. "Close Elections" are those elections where candidate voteshares are between 0.4 and 0.6. Contribution amount is the total amount of all donations to the recipient candidate, in real 2014 US dollars. *Sources*: Database on Ideology, Money in Politics, and Elections; CQ Voting and Elections Collection.

Table 11: Summary Statistics for Senate Donors

| | All Elections | Close Elections |
|---|---|---|
| Contribution Amount ($) | 1131.49 | 1131.06 |
| | [938.46] | [932.88] |
| Make Senate Contribution, $t+1$ | 0.11 | 0.12 |
| | [0.32] | [0.32] |
| Give to Same Candidate, $t+1$ | 0.02 | 0.02 |
| | [0.14] | [0.14] |
| Give to New Candidate, $t+1$ | 0.10 | 0.10 |
| | [0.30] | [0.30] |
| Give to Same State, $t+1$ | 0.07 | 0.07 |
| | [0.25] | [0.25] |
| Give to New State, $t+1$ | 0.05 | 0.05 |
| | [0.22] | [0.22] |
| Candidate Voteshare | 0.54 | 0.51 |
| | [0.10] | [0.05] |
| Candidate Wins | 0.61 | 0.53 |
| | [0.49] | [0.50] |
| Democrat Recipient | 0.50 | 0.49 |
| | [0.50] | [0.50] |
| Incumbent Recipient | 0.50 | 0.42 |
| | [0.50] | [0.49] |
| Candidate Runs for Senate, $t+1$ | 0.02 | 0.03 |
| | [0.15] | [0.18] |
| Observations | 964436 | 683118 |

*Notes*: Contribution records are collapsed to the contributor-candidate-cycle level. Those observations where the total contribution does not exceed $200 are excluded. Observations with Bonica CID less than 1,000,000 are excluded (potential PAC, union or firm contributions). Contributions from candidates to their own campaigns are excluded. Contributions from contributors where total contributions to any single election exceed Federal limits are excluded. Candidates matched to CQ Press general election returns by last name, then fuzzy matched on last name and inspected manually for errors. Sample restricted to only individuals donating to one candidate in a cycle and that candidate seeks election in the Souse. "Close Elections" are those elections where candidate voteshares are between 0.4 and 0.6. Contribution amount is the total amount of all donations to the recipient candidate, in real 2014 US dollars. $t+1$ is the election cycle following the close election. *Sources*: Database on Ideology, Money in Politics, and Elections; CQ Voting and Elections Collection.

of repeat givers), while giving to new states 5% of the time (about 40% of repeat givers).

Similar to the House samples, the differences in the Senate samples mainly occur in candidate-level characteristics. Average recipient candidate voteshare is 54% in the sample of all elections, while only 51% in the sample of close elections. The likelihood of recipient candidate victory is higher in the larger sample (61% compared to 53%). Recipients in the larger sample are more often Republican (50% compared to 49%) and incumbents (50% compared to 42%). As mentioned above, the likelihood of the recipient candidate running again in the next cycle is negligible in both samples: 2% in the larger sample compared to 3% in close elections.

# Appendix B Additional Results

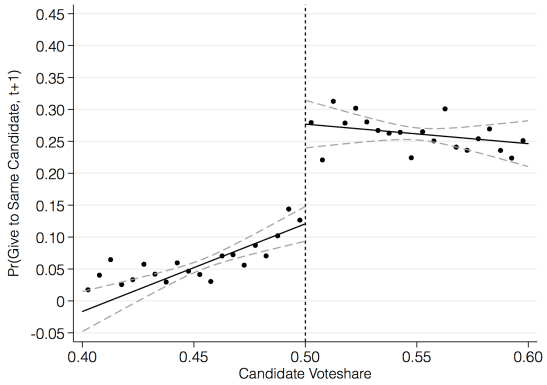
Table 12: Regression Discontinuity Estimates: Effect of Close Candidate Victory on House Candidates Running for Senate

| | (1) $t-1$ | (2) $t+1$ | (3) $t+2$ | (4) $t+3$ |
|---|---|---|---|---|
| Candidate Wins | -0.003 | 0.004 | 0.024** | 0.027** |
| | (0.003) | (0.008) | (0.009) | (0.011) |
| Constant | 0.003 | 0.011** | 0.006 | 0.007* |
| | (0.003) | (0.005) | (0.004) | (0.004) |
| Observations | 3495 | 3726 | 3448 | 3146 |
| Elections | 1854 | 1984 | 1843 | 1690 |

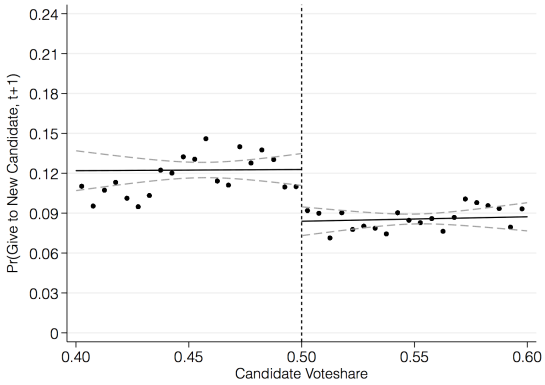
*Notes*: Entries are results of estimation of equation (2) with the dependent variable being an indicator of a candidate running in a primary or general election Senate campaign in the cycle indicated in the column heading. Regressions are estimated with triangular weights and slope coefficients are omitted. Robust standard errors for all regressions are clustered at the congressional district level and are presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ *** $p < 0.01$

Figure 4: Additional RD Figures (House)

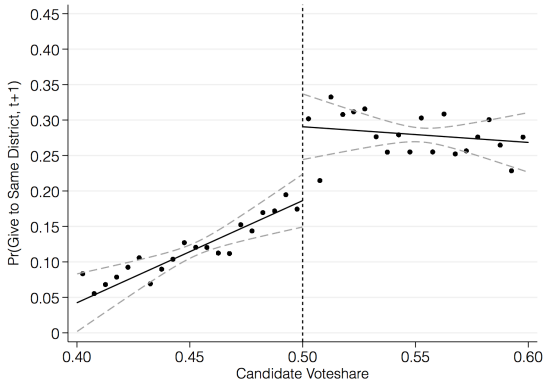
(a) Give to Same Candidate



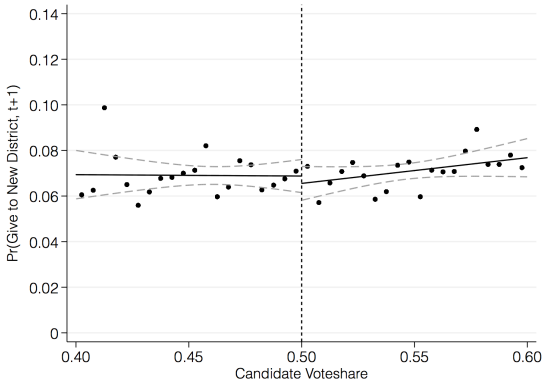

(b) Give to New Candidate



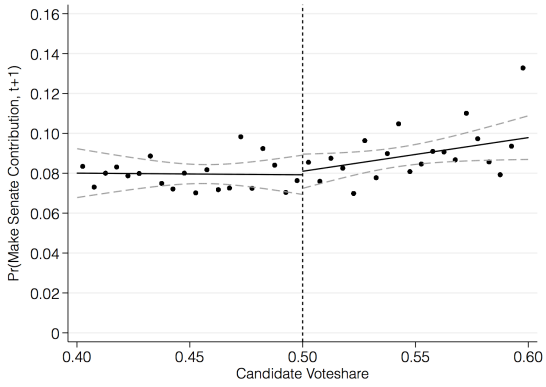

(c) Give to Same District




(d) Give to New District




(e) Give to Senate




*Notes*: Panel headings denote dependent variables. All dependent variables measured in cycle $t+1$. The x-axes represent the two-party general election voteshare of the candidate recipient in time $t$. Solid lines are estimated via ordinary least squares using triangular weights. Standard errors clustered at the Congressional district level are represented by dashed lines. The bin width for all figures is 0.5 percentage points.

Table 13: Regression Discontinuity Estimates: Effect of Close Candidate Victory on Giving Within State (Senate)

| | (1) $t-1$ | (2) $t+1$ | (3) $t+2$ | (4) $t+3$ |
|---|---|---|---|---|
| ***Panel A:*** | | | | |
| *Pr(Give to Same State)* | | | | |
| Candidate Wins | 0.001 | 0.036*** | 0.038*** | 0.072*** |
| | (0.013) | (0.012) | (0.006) | (0.012) |
| Constant | 0.065*** | 0.050*** | 0.045*** | 0.083*** |
| | (0.013) | (0.007) | (0.009) | (0.008) |
| ***Panel B:*** | | | | |
| *Pr(Give to Same Cand. in Same State)* | | | | |
| Candidate Wins | -0.004 | 0.023** | 0.038*** | 0.109*** |
| | (0.014) | (0.009) | (0.008) | (0.016) |
| Constant | 0.032*** | 0.012** | 0.007** | 0.016*** |
| | (0.009) | (0.006) | (0.003) | (0.006) |
| ***Panel C:*** | | | | |
| *Pr(Give to New Cand. in Same State)* | | | | |
| Candidate Wins | 0.005 | 0.016 | 0.005 | -0.035*** |
| | (0.008) | (0.011) | (0.005) | (0.009) |
| Constant | 0.036*** | 0.038*** | 0.038*** | 0.069*** |
| | (0.009) | (0.006) | (0.009) | (0.008) |
| Observations | 671230 | 683118 | 619836 | 549817 |
| Contributors | 603076 | 613520 | 558645 | 498400 |
| Elections | 256 | 279 | 262 | 247 |

*Notes*: Panel A displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution exceeding $200 to a Senate candidate in the same state as the cycle $t$ candidate in the cycle indicated in the column heading. Panel B displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution exceeding $200 to the cycle $t$ candidate in the same state as the cycle $t$ candidate in the cycle indicated in the column heading. Panel C displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution exceeding $200 to a Senate candidate other than the cycle $t$ candidate in the same state as the cycle $t$ candidate in the cycle indicated in the column heading. In all cases, regressions are estimated with triangular weights and slope coefficients are omitted. Robust standard errors for all regressions are clustered at the state level and are presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

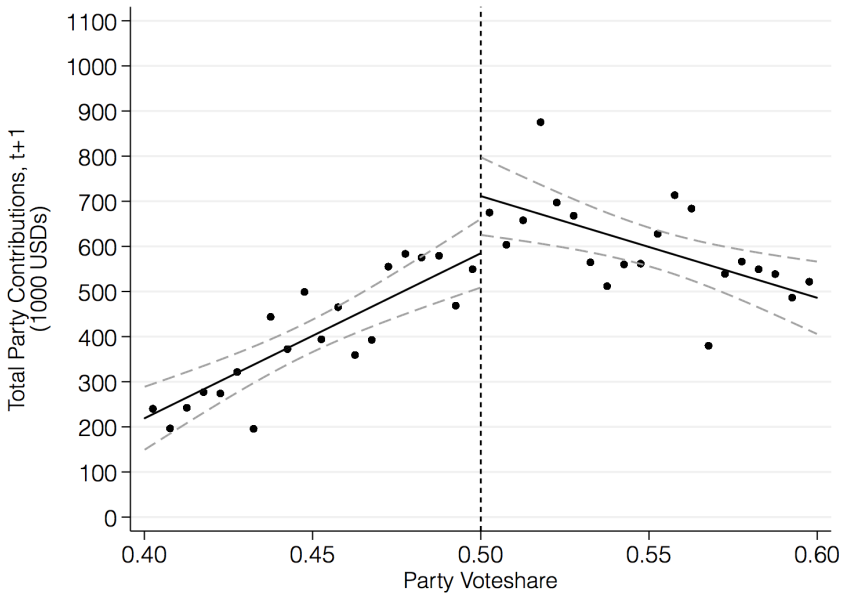
Table 14: Regression Discontinuity Estimates: Effect of Close Candidate Victory on Giving to House and Giving to Other States (Senate)

| | (1) $t-1$ | (2) $t+1$ | (3) $t+2$ | (4) $t+3$ |
|---|---|---|---|---|
| ***Panel A:*** | | | | |
| *Pr(Make House Contribution)* | | | | |
| Candidate Wins | -0.009 | -0.004 | 0.000 | 0.006 |
| | (0.006) | (0.006) | (0.005) | (0.004) |
| Constant | 0.078*** | 0.101*** | 0.100*** | 0.092*** |
| | (0.005) | (0.007) | (0.005) | (0.003) |
| ***Panel B:*** | | | | |
| *Pr(Give to New State)* | | | | |
| Candidate Wins | -0.002 | 0.001 | 0.000 | -0.000 |
| | (0.006) | (0.008) | (0.006) | (0.006) |
| Constant | 0.046*** | 0.057*** | 0.051*** | 0.045*** |
| | (0.005) | (0.006) | (0.004) | (0.003) |
| Observations | 671230 | 683118 | 619836 | 549817 |
| Contributors | 603076 | 613520 | 558645 | 498400 |
| Elections | 256 | 279 | 262 | 247 |

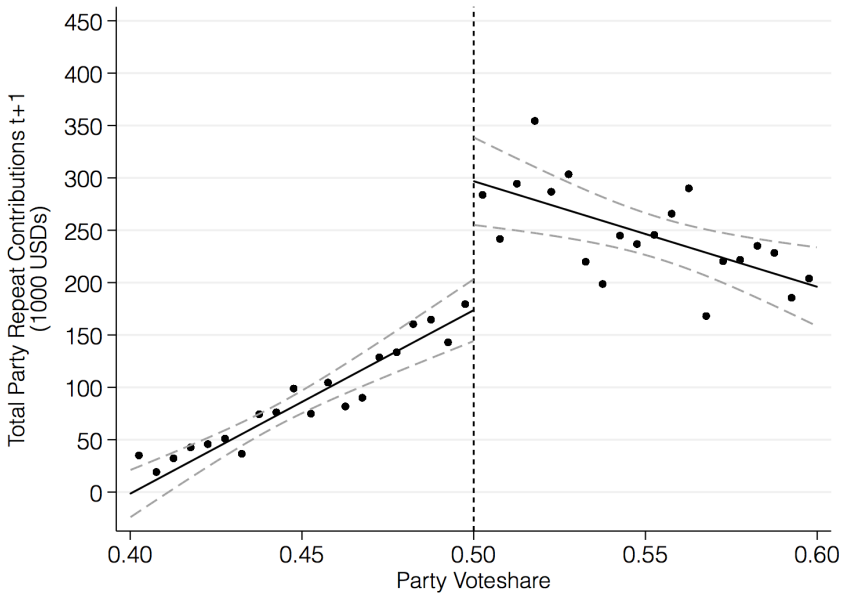
*Notes*: Panel A displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution exceeding $200 to a House candidate in the cycle indicated in the column heading. Panel B displays results of estimation of equation (1) with the dependent variable being an indicator of an individual making a contribution exceeding $200 to a Senate candidate in a state other than that of the cycle $t$ candidate in the cycle indicated in the column heading. In both cases, regressions are estimated with triangular weights and slope coefficients are omitted. Robust standard errors for all regressions are clustered at the state level and are presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Figure 5: Additional Incumbency RD Figures

(a) Total Party Contributions




(b) Total Party Repeat Contributions




*Notes*: Panel (a) displays the average value by bin of Party Total, defined above, in cycle $t+1$. The x-axis represents the two-party general election voteshare of the party's candidate in time $t$. Solid lines are estimated via ordinary least squares using triangular weights. Standard errors clustered at the Congressional district level are represented by dashed lines. Panel (b) displays the the average value by bin of Party Repeat Total, defined above, in cycle $t+1$. The x-axis is the two-party general election voteshare of the party's candidate in cycle $t$. Solid lines are estimated via ordinary least squares using triangular weights. Standard errors clustered at the Congressional district level are represented by dashed lines. The bin width for both figures is 0.5 percentage points.

# Appendix C Robustness

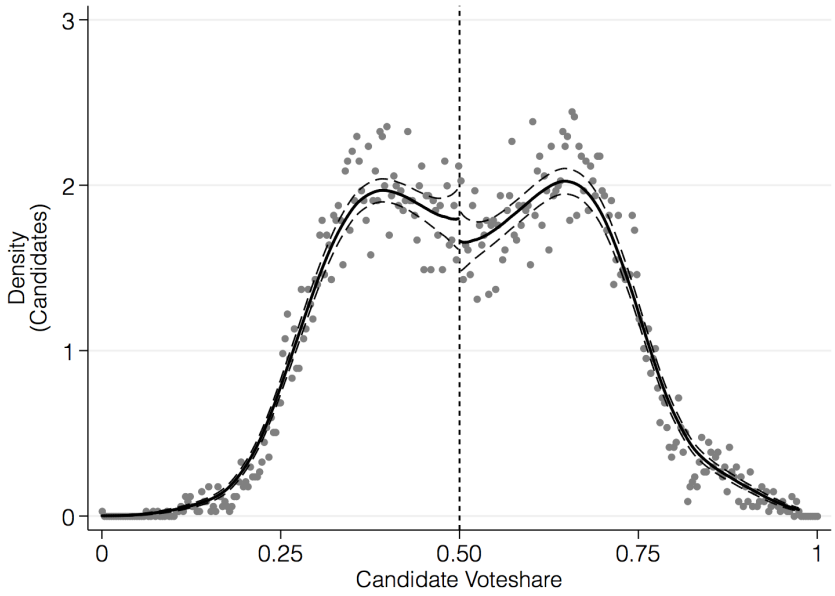
Table 15: Robustness: Lagged Party Totals and Shares of Contributions

| | (1) Party Share | (2) Party Repeat Share | (3) Party Total | (4) Party Repeat Total |
|---|---|---|---|---|
| Party Win | 0.013 | 0.005 | 39.571 | 8.151 |
| | (0.023) | (0.008) | (41.498) | (12.904) |
| Constant | 0.493*** | 0.093*** | 705.721*** | 150.953*** |
| | (0.012) | (0.005) | (50.422) | (14.586) |
| Observations | 2732 | 2732 | 2732 | 2732 |
| Elections | 1366 | 1366 | 1366 | 1366 |
| Districts | 773 | 773 | 773 | 773 |

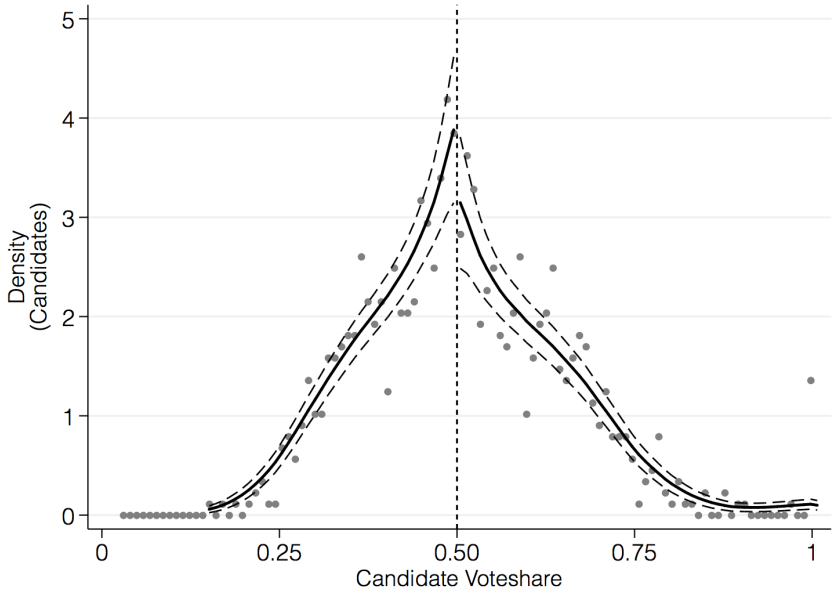
*Notes*: Entries are coefficients resulting from estimation of equation (3) with the dependent variables indicated by column headings, analogous to those defined in section 5 except measured in cycle $t$. In all cases, regressions are estimated with triangular weights and slope coefficients are omitted. Robust standard errors for all regressions are clustered at the Congressional district level and are presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Figure 6: McCrary Tests (Main Results)

(a) House Candidates



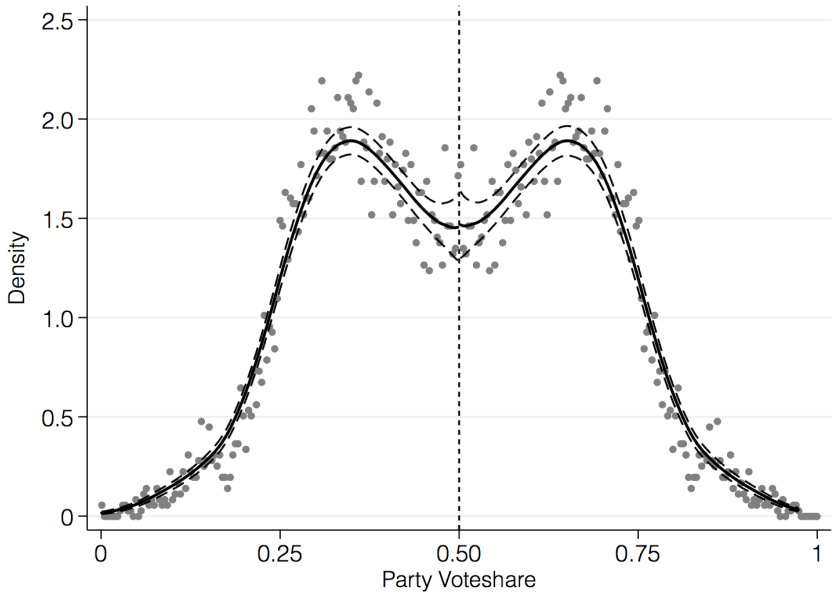

(b) Senate Candidates



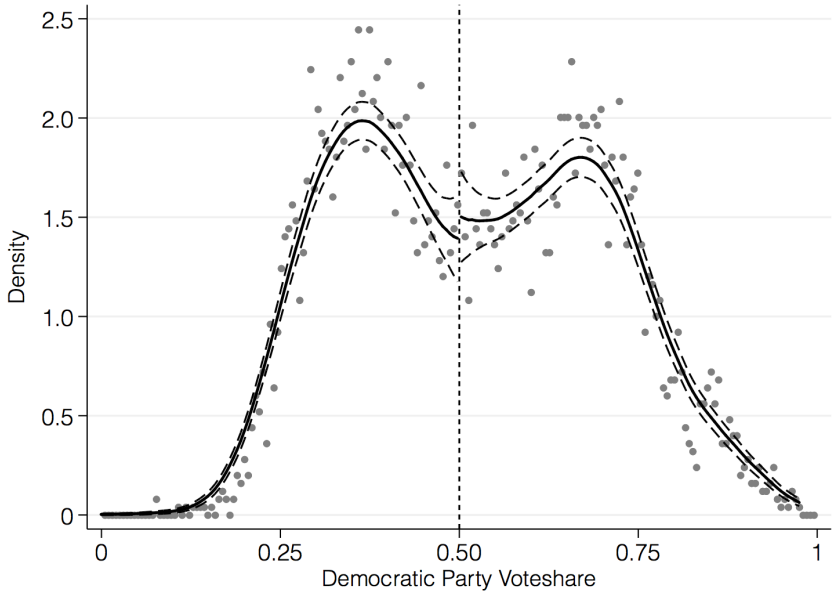

*Notes*: Panel (a) displays density of vote shares for recipient House candidates in the main sample. Panel (b) displays deensity of vote shares for recipient Senate candidates in the main sample. Based on McCrary (2008).

Figure 7: McCrary Tests (Incumbency)

(a) Both Parties




(b) Democratic Party




*Notes*: Panel (a) displays density of vote shares for parties used in the financial incumbency analysis. Panel (b) displays density of vote shares for only the Democratic party observations used in the financial incumbency analysis. Based on McCrary (2008).

Table 16: Regression Discontinuity Estimates: Effect of Party Victory on Democratic Party Contributions Next Cycle

| | (1) Party Share | (2) Party Repeat Share | (3) Party Total | (4) Party Repeat Total |
|---|---|---|---|---|
| Party Win | 0.122*** | 0.091*** | 210.813*** | 142.185*** |
| | (0.026) | (0.013) | (79.064) | (34.903) |
| Constant | 0.375*** | 0.092*** | 515.397*** | 157.357*** |
| | (0.019) | (0.007) | (54.847) | (21.975) |
| Observations | 1502 | 1502 | 1502 | 1502 |
| Elections | 1502 | 1502 | 1502 | 1502 |
| Districts | 831 | 831 | 831 | 831 |

*Notes*: Entries are coefficients resulting from estimation of equation (3) with the dependent variables indicated by column headings, all of which are defined above. Only observations from the Democratic Party are included. In all cases, regressions are estimated with triangular weights and slope coefficients are omitted. Robust standard errors for all regressions are clustered at the Congressional district level and are presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 17: Robustness: Discontinuity Estimates Using Balanced Panel (House)

| | (1) $t-1$ | (2) $t+1$ | (3) $t+2$ | (4) $t+3$ |
|---|---|---|---|---|
| Make House Contribution | -0.006 | 0.085*** | 0.048*** | 0.031* |
| | (0.026) | (0.024) | (0.016) | (0.017) |
| Give to Same Candidate | -0.005 | 0.136*** | 0.089*** | 0.057*** |
| | (0.029) | (0.032) | (0.018) | (0.019) |
| Give to New Candidate | -0.003 | -0.036*** | -0.030*** | -0.015 |
| | (0.006) | (0.013) | (0.011) | (0.011) |
| Make Senate Contribution | 0.008 | -0.003 | -0.000 | 0.002 |
| | (0.011) | (0.008) | (0.010) | (0.009) |
| Give to Same District | -0.016 | 0.091*** | 0.054*** | 0.036** |
| | (0.025) | (0.027) | (0.017) | (0.016) |
| Give to Same Cand. in Same Dist. | -0.016 | 0.134*** | 0.089*** | 0.057*** |
| | (0.028) | (0.032) | (0.018) | (0.019) |
| Give to New Cand. in Same Dist. | -0.002 | -0.044*** | -0.034*** | -0.024** |
| | (0.005) | (0.011) | (0.011) | (0.011) |
| Give to New District | 0.008 | 0.002 | -0.001 | -0.001 |
| | (0.009) | (0.009) | (0.008) | (0.008) |
| Observations | 100211 | 100211 | 100211 | 100211 |
| Candidate Runs for House | -0.063 | 0.422*** | 0.499*** | 0.370*** |
| | (0.093) | (0.070) | (0.069) | (0.078) |
| Observations | 631 | 631 | 631 | 631 |

*Notes*: All regressions employ a triangular kernel and 10 percentage point bandwidth. Each entry is the regression coefficient on whether the recipient candidate wins in time $t$. All other coefficients are excluded. Dependent variables for each regression are described in each row. Timing of past and future donations are given in the column headings. Robust standard errors, clustered at the Congressional district level, presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 18: Robustness: Discontinuity Estimates Using Balanced Panel (Senate)

| | (1) $t-1$ | (2) $t+1$ | (3) $t+2$ | (4) $t+3$ |
|---|---|---|---|---|
| Make Senate Contribution | 0.003 | 0.027** | 0.033*** | 0.065*** |
| | (0.014) | (0.013) | (0.009) | (0.010) |
| Give to Same Candidate | 0.001 | 0.025** | 0.041*** | 0.109*** |
| | (0.016) | (0.010) | (0.009) | (0.016) |
| Give to New Candidate | 0.003 | 0.008 | 0.000 | -0.034*** |
| | (0.010) | (0.010) | (0.009) | (0.010) |
| Make House Contribution | -0.007 | -0.010 | -0.004 | 0.004 |
| | (0.005) | (0.007) | (0.006) | (0.004) |
| Give to Same State | 0.008 | 0.032** | 0.037*** | 0.071*** |
| | (0.014) | (0.013) | (0.007) | (0.012) |
| Give to Same Cand. in Same State | 0.001 | 0.025** | 0.041*** | 0.109*** |
| | (0.016) | (0.010) | (0.009) | (0.016) |
| Give to New Cand. in Same State | 0.009 | 0.010 | 0.002 | -0.036*** |
| | (0.008) | (0.012) | (0.006) | (0.010) |
| Give to New State | -0.004 | -0.001 | -0.001 | -0.000 |
| | (0.006) | (0.009) | (0.006) | (0.006) |
| Observations | 537929 | 537929 | 537929 | 537929 |
| | | | | |
| Candidate Runs for Senate | 0.027 | -0.013 | -0.019 | 0.746*** |
| | (0.041) | (0.029) | (0.035) | (0.069) |
| Observations | 390 | 390 | 390 | 390 |

*Notes*: All regressions employ a triangular kernel and 10 percentage pint bandwidth. Each entry is the regression coefficient on whether the recipient candidate wins in time $t$. All other coefficients are excluded. Dependent variables for each regression are described in each row. Timing of past and future donations are given in the column headings. Robust standard errors, clustered at the state level, presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 19: Robustness: Discontinuity Estimates with Alternative Bandwidths and Triangular Kernel (House)

| | $t-1$ | | | $t+1$ | | | $t+2$ | | | $t+3$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10 | 5 | 2 | 10 | 5 | 2 | 10 | 5 | 2 | 10 | 5 | 2 |
| Make House Contribution | -0.001 | 0.014 | 0.030 | 0.099*** | 0.089*** | 0.076* | 0.058*** | 0.056*** | 0.039** | 0.033*** | 0.027** | 0.017 |
| | (0.014) | (0.018) | (0.029) | (0.020) | (0.030) | (0.039) | (0.009) | (0.014) | (0.019) | (0.008) | (0.012) | (0.018) |
| Give to Same Candidate | 0.005 | 0.024 | 0.046 | 0.156*** | 0.129*** | 0.112*** | 0.088*** | 0.069*** | 0.033 | 0.057*** | 0.047*** | 0.027 |
| | (0.017) | (0.023) | (0.033) | (0.022) | (0.033) | (0.040) | (0.013) | (0.019) | (0.029) | (0.011) | (0.015) | (0.023) |
| Give to New Candidate | -0.006 | -0.008 | -0.013 | -0.039*** | -0.024** | -0.014 | -0.018*** | -0.003 | 0.015 | -0.015*** | -0.011 | -0.007 |
| | (0.006) | (0.009) | (0.013) | (0.007) | (0.010) | (0.013) | (0.006) | (0.008) | (0.010) | (0.005) | (0.007) | (0.011) |
| Make Senate Contribution | -0.001 | -0.002 | -0.004 | 0.002 | 0.004 | 0.009 | -0.002 | -0.006 | 0.003 | 0.012* | 0.015 | 0.020 |
| | (0.008) | (0.012) | (0.017) | (0.005) | (0.006) | (0.009) | (0.005) | (0.006) | (0.010) | (0.006) | (0.009) | (0.015) |
| Observations | 807308 | 442425 | 197865 | 818141 | 449327 | 201054 | 702559 | 383398 | 166673 | 583824 | 314640 | 137246 |
| Give to Same District | -0.026 | -0.011 | 0.014 | 0.104*** | 0.088** | 0.077 | 0.063*** | 0.058*** | 0.044* | 0.048*** | 0.050*** | 0.026 |
| | (0.019) | (0.028) | (0.043) | (0.027) | (0.041) | (0.050) | (0.011) | (0.016) | (0.025) | (0.012) | (0.016) | (0.024) |
| Give to Same Cand. in Same Dist. | -0.023 | -0.000 | 0.031 | 0.152*** | 0.118*** | 0.097** | 0.093*** | 0.066*** | 0.025 | 0.065*** | 0.058*** | 0.025 |
| | (0.024) | (0.036) | (0.054) | (0.027) | (0.040) | (0.049) | (0.015) | (0.023) | (0.036) | (0.013) | (0.018) | (0.026) |
| Give to New Cand. in Same Dist. | -0.002 | -0.008 | -0.014 | -0.046*** | -0.029*** | -0.020 | -0.030*** | -0.006 | 0.023 | -0.019** | -0.010 | -0.004 |
| | (0.007) | (0.010) | (0.016) | (0.009) | (0.011) | (0.017) | (0.009) | (0.011) | (0.016) | (0.008) | (0.009) | (0.016) |
| Give to New District | -0.002 | -0.004 | -0.002 | -0.003 | -0.001 | -0.002 | -0.004 | -0.006 | -0.005 | 0.000 | -0.001 | 0.008 |
| | (0.004) | (0.005) | (0.006) | (0.004) | (0.006) | (0.009) | (0.006) | (0.007) | (0.011) | (0.007) | (0.010) | (0.017) |
| Observations | 393446 | 207625 | 94710 | 607370 | 329156 | 153564 | 343772 | 192581 | 91946 | 198553 | 107521 | 47336 |
| Candidate Runs for House | -0.013 | 0.022 | 0.086 | 0.485*** | 0.409*** | 0.340*** | 0.482*** | 0.430*** | 0.384*** | 0.410*** | 0.369*** | 0.316*** |
| | (0.039) | (0.056) | (0.088) | (0.029) | (0.042) | (0.065) | (0.036) | (0.053) | (0.085) | (0.037) | (0.056) | (0.088) |
| Observations | 3495 | 1677 | 672 | 3726 | 1803 | 724 | 3448 | 1684 | 678 | 3146 | 1523 | 616 |

*Notes*: All regressions employ a triangular kernel. Each entry is the regression coefficient on whether the recipient candidate wins in time $t$. All other coefficients are excluded. Dependent variables for each regression are described in each row. Timing of past and future donations and bandwidths are given in the column headings. Robust standard errors, clustered at the Congressional district level, presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 20: Robustness: Discontinuity Estimates with Alternative Bandwidths and Rectangular Kernel (House)

| | $t-1$ | | | $t+1$ | | | $t+2$ | | | $t+3$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10 | 5 | 2 | 10 | 5 | 2 | 10 | 5 | 2 | 10 | 5 | 2 |
| Make House Contribution | -0.009 | 0.010 | 0.032 | 0.104*** | 0.099*** | 0.075* | 0.060*** | 0.065*** | 0.039** | 0.037*** | 0.031*** | 0.020 |
| | (0.012) | (0.017) | (0.025) | (0.016) | (0.025) | (0.039) | (0.008) | (0.012) | (0.019) | (0.007) | (0.010) | (0.016) |
| Give to Same Candidate | -0.005 | 0.017 | 0.050* | 0.170*** | 0.147*** | 0.103** | 0.097*** | 0.088*** | 0.035 | 0.062*** | 0.055*** | 0.034* |
| | (0.015) | (0.021) | (0.029) | (0.018) | (0.028) | (0.043) | (0.011) | (0.016) | (0.025) | (0.009) | (0.013) | (0.021) |
| Give to New Candidate | -0.006 | -0.006 | -0.014 | -0.046*** | -0.029*** | -0.016 | -0.024*** | -0.010 | 0.008 | -0.014*** | -0.014** | -0.010 |
| | (0.005) | (0.008) | (0.011) | (0.006) | (0.009) | (0.012) | (0.006) | (0.007) | (0.010) | (0.005) | (0.006) | (0.010) |
| Make Senate Contribution | -0.001 | -0.002 | -0.000 | 0.000 | 0.001 | 0.012 | 0.002 | -0.005 | 0.006 | 0.011** | 0.011 | 0.019 |
| | (0.007) | (0.010) | (0.017) | (0.005) | (0.006) | (0.008) | (0.005) | (0.006) | (0.009) | (0.005) | (0.008) | (0.013) |
| Observations | 807308 | 442425 | 197865 | 818141 | 449327 | 201054 | 702559 | 383398 | 166673 | 583824 | 314640 | 137246 |
| Give to Same District | -0.030* | -0.021 | 0.018 | 0.111*** | 0.101*** | 0.070 | 0.070*** | 0.071*** | 0.045** | 0.046*** | 0.052*** | 0.036 |
| | (0.016) | (0.025) | (0.040) | (0.022) | (0.035) | (0.054) | (0.010) | (0.014) | (0.022) | (0.011) | (0.015) | (0.022) |
| Give to Same Cand. in Same Dist. | -0.030 | -0.014 | 0.039 | 0.167*** | 0.140*** | 0.090* | 0.107*** | 0.093*** | 0.037 | 0.063*** | 0.072*** | 0.032 |
| | (0.020) | (0.032) | (0.050) | (0.022) | (0.035) | (0.053) | (0.013) | (0.019) | (0.031) | (0.012) | (0.017) | (0.024) |
| Give to New Cand. in Same Dist. | 0.000 | -0.005 | -0.017 | -0.054*** | -0.038*** | -0.019 | -0.037*** | -0.021** | 0.009 | -0.019*** | -0.022** | -0.001 |
| | (0.006) | (0.009) | (0.015) | (0.008) | (0.010) | (0.015) | (0.008) | (0.010) | (0.015) | (0.007) | (0.009) | (0.014) |
| Give to New District | -0.002 | -0.002 | -0.011 | -0.003 | -0.002 | -0.007 | -0.005 | -0.005 | -0.011 | -0.000 | 0.002 | -0.002 |
| | (0.004) | (0.005) | (0.008) | (0.004) | (0.005) | (0.008) | (0.005) | (0.007) | (0.010) | (0.006) | (0.009) | (0.015) |
| Observations | 393446 | 207625 | 94710 | 607370 | 329156 | 153564 | 343772 | 192581 | 91946 | 198553 | 107521 | 47336 |
| Candidate Runs for House | -0.012 | 0.016 | 0.099 | 0.509*** | 0.435*** | 0.336*** | 0.500*** | 0.466*** | 0.367*** | 0.417*** | 0.386*** | 0.326*** |
| | (0.034) | (0.052) | (0.079) | (0.026) | (0.037) | (0.059) | (0.031) | (0.045) | (0.076) | (0.032) | (0.048) | (0.079) |
| Observations | 3495 | 1677 | 672 | 3726 | 1803 | 724 | 3448 | 1684 | 678 | 3146 | 1523 | 616 |

*Notes*: All regressions employ a rectangular kernel. Each entry is the regression coefficient on whether the recipient candidate wins in time $t$. All other coefficients are excluded. Dependent variables for each regression are described in each row. Timing of past and future donations and bandwidths are given in the column headings. Robust standard errors, clustered at the Congressional district level, presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 21: Robustness: Discontinuity Estimates Using Alternative Bandwidths and Triangular Kernel (Senate)

| | $t-1$ | | | $t+1$ | | | $t+2$ | | | $t+3$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10 | 5 | 2 | 10 | 5 | 2 | 10 | 5 | 2 | 10 | 5 | 2 |
| Make Senate Contribution | -0.002 | -0.002 | -0.037*** | 0.034*** | 0.031* | 0.026 | 0.035*** | 0.028*** | 0.015 | 0.066*** | 0.053*** | 0.033* |
| | (0.013) | (0.015) | (0.012) | (0.012) | (0.016) | (0.025) | (0.008) | (0.010) | (0.016) | (0.010) | (0.013) | (0.018) |
| Give to Same Candidate | -0.004 | 0.010 | -0.021 | 0.023** | 0.023* | 0.008 | 0.038*** | 0.037*** | 0.032*** | 0.109*** | 0.092*** | 0.060 |
| | (0.014) | (0.016) | (0.016) | (0.009) | (0.013) | (0.026) | (0.008) | (0.008) | (0.009) | (0.016) | (0.024) | (0.039) |
| Give to New Candidate | 0.002 | -0.010 | -0.021* | 0.016* | 0.013 | 0.023 | 0.005 | -0.000 | -0.010 | -0.033*** | -0.029* | -0.019 |
| | (0.009) | (0.011) | (0.013) | (0.009) | (0.012) | (0.015) | (0.008) | (0.011) | (0.018) | (0.010) | (0.015) | (0.021) |
| Make House Contribution | -0.009 | -0.020** | -0.023 | -0.004 | -0.009 | -0.014 | 0.000 | -0.007 | -0.005 | 0.006 | 0.006 | -0.003 |
| | (0.006) | (0.009) | (0.015) | (0.006) | (0.009) | (0.013) | (0.005) | (0.005) | (0.009) | (0.004) | (0.005) | (0.005) |
| Give to Same State | 0.001 | 0.003 | -0.039*** | 0.036*** | 0.031** | 0.023 | 0.038*** | 0.027*** | 0.008 | 0.072*** | 0.055*** | 0.033 |
| | (0.013) | (0.017) | (0.014) | (0.012) | (0.013) | (0.019) | (0.006) | (0.008) | (0.009) | (0.012) | (0.014) | (0.020) |
| Give to Same Cand. in Same State | -0.004 | 0.010 | -0.021 | 0.023** | 0.022* | 0.008 | 0.038*** | 0.037*** | 0.032*** | 0.109*** | 0.092*** | 0.060 |
| | (0.014) | (0.016) | (0.016) | (0.009) | (0.013) | (0.026) | (0.008) | (0.008) | (0.009) | (0.016) | (0.024) | (0.039) |
| Give to New Cand. in Same State | 0.005 | -0.005 | -0.022*** | 0.016 | 0.012 | 0.018 | 0.005 | -0.005 | -0.021* | -0.035*** | -0.036** | -0.027 |
| | (0.008) | (0.008) | (0.008) | (0.011) | (0.013) | (0.020) | (0.005) | (0.007) | (0.010) | (0.009) | (0.016) | (0.024) |
| Give to New State | -0.002 | -0.004 | -0.001 | 0.001 | 0.003 | 0.006 | 0.000 | 0.004 | 0.008 | -0.000 | 0.004 | 0.005 |
| | (0.006) | (0.008) | (0.013) | (0.008) | (0.010) | (0.016) | (0.006) | (0.007) | (0.012) | (0.006) | (0.006) | (0.007) |
| Observations | 671230 | 396592 | 175825 | 683118 | 405864 | 181402 | 619836 | 361184 | 177218 | 549817 | 326250 | 163895 |
| Candidate Runs for Senate | 0.025 | 0.087 | 0.101 | -0.022 | -0.009 | -0.014 | -0.022 | -0.029 | 0.007 | 0.710*** | 0.641*** | 0.612*** |
| | (0.038) | (0.054) | (0.086) | (0.027) | (0.037) | (0.025) | (0.033) | (0.037) | (0.016) | (0.070) | (0.110) | (0.191) |
| Observations | 446 | 253 | 117 | 483 | 282 | 134 | 455 | 265 | 130 | 427 | 254 | 125 |

*Notes*: All regressions employ a triangular kernel. Each entry is the regression coefficient on whether the recipient candidate wins in time $t$. All other coefficients are excluded. Dependent variables for each regression are described in each row. Timing of past and future donations and bandwidths are given in the column headings. Robust standard errors, clustered at the state level, presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 22: Robustness: Discontinuity Estimates Using Alternative Bandwidths and Rectangular Kernel (Senate)

| | $t-1$ | | | $t+1$ | | | $t+2$ | | | $t+3$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10 | 5 | 2 | 10 | 5 | 2 | 10 | 5 | 2 | 10 | 5 | 2 |
| Make Senate Contribution | 0.000 | -0.002 | -0.034** | 0.030*** | 0.039** | 0.020 | 0.037*** | 0.030*** | 0.012 | 0.064*** | 0.061*** | 0.038* |
| | (0.014) | (0.016) | (0.015) | (0.009) | (0.017) | (0.024) | (0.007) | (0.011) | (0.015) | (0.009) | (0.014) | (0.019) |
| Give to Same Candidate | -0.006 | 0.001 | -0.010 | 0.018** | 0.033** | 0.011 | 0.038*** | 0.042*** | 0.030*** | 0.108*** | 0.104*** | 0.065* |
| | (0.014) | (0.016) | (0.018) | (0.007) | (0.016) | (0.019) | (0.008) | (0.009) | (0.010) | (0.014) | (0.020) | (0.037) |
| Give to New Candidate | 0.006 | -0.002 | -0.026* | 0.016* | 0.012 | 0.013 | 0.007 | -0.002 | -0.012 | -0.033*** | -0.033** | -0.020 |
| | (0.009) | (0.011) | (0.014) | (0.008) | (0.009) | (0.019) | (0.007) | (0.010) | (0.016) | (0.009) | (0.012) | (0.020) |
| Make House Contribution | -0.004 | -0.017** | -0.024* | -0.003 | -0.009 | -0.015 | 0.002 | -0.004 | -0.008 | 0.007 | 0.006 | -0.002 |
| | (0.005) | (0.008) | (0.013) | (0.006) | (0.008) | (0.014) | (0.005) | (0.005) | (0.010) | (0.004) | (0.005) | (0.006) |
| Give to Same State | 0.002 | 0.002 | -0.028* | 0.031*** | 0.039** | 0.025 | 0.039*** | 0.031*** | 0.012 | 0.070*** | 0.065*** | 0.044** |
| | (0.014) | (0.016) | (0.016) | (0.011) | (0.017) | (0.019) | (0.007) | (0.009) | (0.010) | (0.011) | (0.016) | (0.021) |
| Give to Same Cand. in Same State | -0.006 | 0.001 | -0.010 | 0.019*** | 0.032* | 0.011 | 0.038*** | 0.042*** | 0.030*** | 0.108*** | 0.104*** | 0.065* |
| | (0.014) | (0.016) | (0.018) | (0.007) | (0.016) | (0.019) | (0.008) | (0.009) | (0.010) | (0.014) | (0.020) | (0.037) |
| Give to New Cand. in Same State | 0.009 | 0.002 | -0.019* | 0.014 | 0.010 | 0.015 | 0.006 | -0.005 | -0.015* | -0.036*** | -0.038*** | -0.022 |
| | (0.008) | (0.008) | (0.009) | (0.011) | (0.011) | (0.021) | (0.005) | (0.006) | (0.009) | (0.008) | (0.012) | (0.023) |
| Give to New State | -0.001 | -0.003 | -0.008 | 0.002 | 0.003 | -0.003 | 0.001 | 0.002 | 0.001 | 0.000 | 0.002 | -0.000 |
| | (0.005) | (0.008) | (0.013) | (0.007) | (0.009) | (0.016) | (0.005) | (0.007) | (0.012) | (0.005) | (0.007) | (0.009) |
| Observations | 671230 | 396592 | 175825 | 683118 | 405864 | 181402 | 619836 | 361184 | 177218 | 549817 | 326250 | 163895 |
| Candidate Runs for Senate | 0.007 | 0.059 | 0.122 | -0.033 | -0.002 | -0.003 | -0.020 | -0.027 | -0.003 | 0.715*** | 0.660*** | 0.571*** |
| | (0.034) | (0.046) | (0.075) | (0.025) | (0.037) | (0.046) | (0.030) | (0.045) | (0.033) | (0.060) | (0.091) | (0.178) |
| Observations | 446 | 253 | 117 | 483 | 282 | 134 | 455 | 265 | 130 | 427 | 254 | 125 |

*Notes*: All regressions employ a rectangular kernel. Each entry is the regression coefficient on whether the recipient candidate wins in time $t$. All other coefficients are excluded. Dependent variables for each regression are described in each row. Timing of past and future donations and bandwidths are given in the column headings. Robust standard errors, clustered at the state level, presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 23: Robustness: Estimates Using Alternative Bandwidths and Triangular Kernel (Incumbency)

| | (1) 10 | (2) 5 | (3) 2 |
|---|---|---|---|
| ***Panel A:*** *Party Share* | | | |
| Party Win | 0.118*** | 0.121*** | 0.071 |
| | (0.027) | (0.039) | (0.057) |
| Constant | 0.441*** | 0.440*** | 0.465*** |
| | (0.014) | (0.019) | (0.028) |
| ***Panel B:*** *Party Repeat Share* | | | |
| Party Win | 0.104*** | 0.097*** | 0.072*** |
| | (0.011) | (0.015) | (0.023) |
| Constant | 0.110*** | 0.115*** | 0.126*** |
| | (0.005) | (0.008) | (0.012) |
| ***Panel C:*** *Party Total* | | | |
| Party Win | 130.660*** | 160.808*** | 154.588** |
| | (30.357) | (43.250) | (69.397) |
| Constant | 580.785*** | 556.264*** | 521.811*** |
| | (38.724) | (46.706) | (67.166) |
| ***Panel D:*** *Party Repeat Total* | | | |
| Party Win | 124.375*** | 118.609*** | 101.404*** |
| | (14.515) | (19.534) | (32.199) |
| Constant | 172.458*** | 180.364*** | 184.613*** |
| | (14.997) | (19.621) | (28.574) |
| Observations | 3004 | 1433 | 580 |
| Elections | 1502 | 717 | 290 |
| Districts | 831 | 477 | 242 |

*Notes*: All regressions employ a triangular kernel. Slope coefficients are excluded. Dependent variables for each regression are described in panel headings. Bandwidths given in column headings. Robust standard errors, clustered at the Congressional district level, presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 24: Robustness: Estimates Using Alternative Bandwidths and Rectangular Kernel (Incumbency)

| | (1) 10 | (2) 5 | (3) 2 |
|---|---|---|---|
| ***Panel A:*** *Party Share* | | | |
| Party Win | 0.111*** | 0.137*** | 0.072 |
| | (0.026) | (0.036) | (0.053) |
| Constant | 0.444*** | 0.432*** | 0.465*** |
| | (0.013) | (0.018) | (0.026) |
| ***Panel B:*** *Party Repeat Share* | | | |
| Party Win | 0.108*** | 0.105*** | 0.075*** |
| | (0.010) | (0.014) | (0.021) |
| Constant | 0.108*** | 0.112*** | 0.122*** |
| | (0.005) | (0.007) | (0.011) |
| ***Panel C:*** *Party Total* | | | |
| Party Win | 117.860*** | 164.220*** | 110.876* |
| | (27.033) | (39.705) | (64.175) |
| Constant | 590.165*** | 576.609*** | 490.417*** |
| | (36.456) | (46.227) | (65.426) |
| ***Panel D:*** *Party Repeat Total* | | | |
| Party Win | 129.379*** | 126.583*** | 81.544*** |
| | (13.187) | (17.971) | (29.685) |
| Constant | 166.737*** | 180.249*** | 168.582*** |
| | (13.374) | (18.034) | (27.682) |
| Observations | 3004 | 1433 | 580 |
| Elections | 1502 | 717 | 290 |
| Districts | 831 | 477 | 242 |

*Notes*: All regressions employ a rectangular kernel. Slope coefficients are excluded. Dependent variables for each regression are described in panel headings. Bandwidths given in column headings. Robust standard errors, clustered at the Congressional district level, presented in parantheses. *Significance*: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$